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## PRESIDENT ISSUES EXECUTIVE ORDER TO END PREDATOR POISONING ON PUBLIC LANDS

In his message on February eighth on "environmental awakening," President Nixon called for action including a ban on use of poisons for predator control, a stronger law to protect endangered species of wild life, 18 new wilderness areas, and regulation of off-road vehicles on Federal lands.

He said, in part, "The widespread use of highly toxic poisons to kill coyotes and other predatory animals and birds is a practice which has been a source of increasing concern to the American public and to the federal officials responsible for the public lands. Last year the Council on Environmental Quality and the Department of the Interior appointed an Advisory Committee on Predator Control to study the entire question of predator and related animal control activities. The Committee found that persistent poisons have been applied to range and forest lands without adequate knowledge of their effects on the ecology or their utility in preventing losses to livestock. The large-scale use of poisons for control of predators and field rodents has resulted in unintended losses of other animals and in other harmful effects on natural ecosystems. . . I am today issuing an Executive Order barring the use of poisons for predator control on all public lands (Exceptions will be made only for emergency situations.)"

On endangered species, he said, in part, "I propose legislation to provide for early identification and protection of endangered species. My new proposal would make the taking of endangered species a Federal offense for the first time, and would permit protective measures to be undertaken before a species is so depleted that regeneration is difficult or impossible."

Concerning migratory species, he noted, "I have authorized the Secretary of State, in conjunction with the Secretary of the Interior, to seek the agreement of the Mexican Government to add 33 new families of birds to the protected list.

"Included in the proposal are eagles, hawks, falcons, owls, and many of the most attractive species of wad-  
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## AWI BOOTH AT AAAS

The Animal Welfare Institute presented a booth exhibit at the annual meeting of the American Association for the Advancement of Science in Philadelphia, December 26-30, 1971. Featuring the current quest for means to replace animals in experiments and tests, to reduce numbers necessary, or to refine techniques to reduce suffering, signs on the AWI booth asked for scientific help in advancing these goals: "In the search for increasingly humane experimental techniques YOUR SUGGESTIONS ARE INVITED. REPLACEMENT of Vertebrate Animals with Other Experimental Subjects or Materials; REDUCTION of Numbers of Animals; REFINEMENT of Technique to Reduce Pain and Anxiety."

Reprints of two papers by Dr. Samuel M. Peacock, Jr. which appeared in *Electroencephalography and Clinical Neurophysiology* were displayed with the following descriptive sign: "The computer averaging technique illustrated on this panel permits 'closed head' investigation of sensory responses in contrast to the 'open head' approach, requiring an operation, which used to be necessary when averaging techniques were not available. This technique permits studies in man, the subject of choice, rather than through implantation of electrodes in the brains of cats and primates."

In the "Reduction" panel, reprints of papers by Dr. Arthur C. Guyton and co-workers which appeared in *Circulation Research* and other journals were shown with a brief quotation, "These computer results are almost identical with the results earlier in this paper from the animal experiments."

## POLICE CHIEFS REQUEST "ANIMALS AND THEIR LEGAL RIGHTS"

Over 1100 Chiefs of Police from all parts of the country responded to the Animal Welfare Institute offer to provide one free copy of ANIMALS AND THEIR LEGAL RIGHTS to every police department in order to aid in knowledge and enforcement of laws protecting animals.

Cruelty to animals is a criminal offense in every state, but the provisions of the state anti-cruelty laws and other state or federal statutes protecting animals are not as well known as they should be to all enforcement agencies.

## HIGH SCHOOL EXPERIMENTATION

### *Rules on Animal Experiments at Houston Science Engineering Fair*

The 1972 "Information Guide" of the Houston Science Engineering Fair contains clear and well-stated requirements regulating experiments with animals. They state in part as follows: "Specifically, the 'Painless Rule' for animal experimentation will be followed in all projects involving animals:

- "(a) That no experimental procedures shall be attempted on a vertebrate animal that would subject it to pain or distinct discomfort;
- "(b) That a lower form of life for experimentation should be selected to a higher form whenever possible;
- "(c) That no surgery, including biopsy, shall be performed on vertebrates;
- "(d) That projects involving such highly intelligent and sensitive mammals as monkeys, cats, and dogs should include only observations of normal behavior of pets (ex., training of kittens by the female cat, etc.) or of animals in a reputable zoo, or those owned by the school;
- "(e) That treatments such as electric, heat or cold shocks, exercise until exhaustion, deprivation of food and/or water, substitution of water with alcohol or drugs, nutritionally deficient diets, or toxicity tests shall not be administered to a vertebrate;
- "(f) That in training experiments on vertebrates, only *positive* reinforcement shall be used."

To ensure compliance, certification of animal experimentation is required as follows: "Students shall not be permitted to participate in the Science Engineering Fair of Houston which is held under the auspices of the International Science Engineering Fair unless an 'Intent to Exhibit an Animal Experiment Project at the Science Engineering Fair of Houston' certificate has been submitted, approved by the Standing Committee on Animal Experimentation." The certificate must be signed by the school biology teacher and the biomedical scientist supervising the project and submitted not less than 15 working days prior to commencement of the animal experimentation aspect of the project to the Standing Committee on Animal Experimentation of the Science Engineering Fair of Houston for approval, disapproval or modification/qualification.

Through careful, humane planning, high quality work may be expected from students at this fair. The Chairman of the Animal Experimentation Committee, Dr. Richard Simmonds, Chief, Manned Spacecraft Center Vivarium and Dr. Kathryn Ansevin, a member of the Committee, deserve much credit for this sound planning.

### *Unsuccessful Attempt to Repeal Illinois Law*

The State of Illinois has a law which provides: "No experiment upon any living animal for the purpose of demonstration in any study shall be made in any public school. No animal provided by, or killed in the pre-

sence of any pupil of a public school shall be used for dissection in such school, and in no case shall dogs or cats be killed for such purposes. Dissection of dead animals, or parts thereof, shall be confined to the classroom and shall not be practiced in the presence of any pupil not engaged in the study to be illustrated thereby." An attempt to repeal this law in 1965 met with failure. A second attempt in the 1971-72 legislative session has again proved unsuccessful. The repeal bill met with such opposition that its author hastily withdrew it and is said to be working on a watered-down version. Commenting on the matter, Bob Cromie stated in the January 1, 1972 issue of *The Chicago Tribune*, "The legislation, House Bill 3610, is sponsored by Rep. Bruce Douglas (D., Chicago), an oral surgeon; Rep. Norbert Springer (R., Chester), an optometrist; and Rep. David Shapiro (R., Amboy), also a dentist. It is, nonetheless, completely toothless, and offers no penalties for violation of its poorly-formulated provisions. A Chicago attorney with whom I checked on this point said: "There is nothing I can see in the bill which would prevent any youngster from hanging an animal by its heels and cutting it up and calling this an experiment."

"Thomas A. Maloney, science fair coordinator of the Board of Education, who termed the bill 'weak and vague,' added:

"If this is passed it will be mayhem. There will be cat and dog cadavers all over the place. Experimentation of this sort on vertebrate animals should be completely barred in the schools — public, private, and parochial — and those few gifted students permitted to observe or take part in such work should do so only in university or medical and industrial laboratories under supervision of highly qualified personnel. This would mean that maybe 12 or 14 youngsters from—let us say—the North Side, would be allowed to take part in such experiments—not 40,000."

"Maloney said the schools already are having problems trying to prevent completely uncalled for and useless experiments which, he believes, the proposed bill would increase tremendously.

"We've been squelching a lot of our students and the teachers, too,' he went on. "Some of the teachers think they have a lot of budding Louis Pasteurs on their hands. I wouldn't even let someone in graduate school fool around with some of the things these kids are doing. But some of those we've stopped say: 'Okay, I'll never study science again.' We tell them: 'Fine. You're the type we don't need.'"

"A proposed law like this is a bunch of nonsense. The students should get basic concepts down first before attempting to do live research. Then, too, some kids can't stomach such experiments, while the ones who don't care for science but like to cut up animals really need to be watched."

## EXPERIMENTAL BIOLOGICAL CONTROL OF PEACH BORER

A report on progress in controlling an insect that harms peaches, the peach borer, without the use of chemical sprays appeared in the February 11, 1972 issue of *The Washington Post*. According to the author of the article, Tom Stevenson, "... USDA Agricultural Research Service entomologists at Vincennes, Indiana have developed a trap technique which may solve the problem. ... A test program of the trap technique was launched in 1969 in an isolated area, Washington Island, Wisconsin in Lake Michigan. The Island is sufficiently remote to prevent insects on the mainland from reaching it in numbers large enough to influence trapping test results with the known borer population on the island. ...

"In 1970, 1,000 traps were used, each baited with five to 10 females. They captured 7,800 males, accounting for all but 2,200 of the males believed to be in the area. On the basis of these results, it is expected that 1971's intensified program may nearly eliminate the borer population in the area.

"Scientists are trying to determine precisely the chemical substance that the female borers produce to attract males. Such information could lead to a synthetic lure more easily handled than live females.

"At the Vincennes laboratory borers are reared to obtain females for trap lines and males for sterile release. ..."

## NEW ANIMAL AND PLANT HEALTH SERVICE

Four regulatory agencies of the U.S. Department of Agriculture have been joined together under the descriptive title: Animal and Plant Health Service. It includes U.S.D.A.'s Animal Health Division which enforces the Animal Welfare Act, P.L. 91-579, the Horse Protection Act, P.L. 91-540, and carries out farm-animal disease control; Veterinary Biologics which monitors the potency, purity and safety of veterinary biologics; Agricultural Quarantine and Inspection; and plant protection which prevent animal and plant diseases from entering the country in imports of animals and plants, and monitor the impact of pesticides. The APHS thus combines all the regulatory functions of the Agricultural Research Service. ARS will continue its research functions.

Dr. F. J. Mulhern, former head of the Animal Health Division and, more recently, Associate Administrator of the Agricultural Research Service, has been appointed head of the APHS. Dr. Mulhern is a Schweitzer Medallist (1967) and was first Chairman of the Animal Welfare Committee of the United States Animal Health Association.

## SEA MAMMALS IN SENATE AND HOUSE

Hearings were held on four separate days by the Subcommittee on Oceans and Atmosphere of which Senator Ernest Hollings (D., S.C.) is Chairman. Senator Hollings asked searching questions of witnesses who oppose strong legislation. He emphasized the lack of knowledge about most of the marine mammals and need for time to acquire such knowledge.

Senator Hubert Humphrey (D., Minn.) offered an amendment to provide a one-year cutoff date by which time any method causing injury or death to any ocean mammal incidental to commercial fishing operations would be illegal. The purpose of the amendment is to save the estimated 250,000 to 900,000 dolphins and porpoises drowned annually in purse seine nets used for the capture of tuna fish. "This tragedy," Senator Humphrey stated "is compounded by the fact that dolphins are justly noted for their extraordinary intelligence, their love for each other, and their seeming friendliness towards man. . . . Because of the limitations of human intelligence, man may never perceive the real nature, the true significance of these unique creatures that he is so needlessly destroying. . . ."

Senator Harrison Williams (D., N. J.) urged adoption of a one-year deadline for modification of present fishing methods to stop incidental killing of dolphins. He proposed other strengthening amendments to the Committee when testifying for his bill, S. 2871. The bill calls for a ten-year moratorium on commercial killing of sea mammals except where treaty obligations prevent it, a ban on imports, and administration of the law by the Department of the Interior rather than dividing it between two Departments, Interior and Commerce.

In the House of Representatives, amendments were offered on the floor March 9th to strengthen the Committee-approved bill. Only those amendments previously agreed to by the Committee were accepted, however. These included a five-year moratorium and ban on imports with a number of qualifications. An amendment offered by Congressman Mario Biaggi (D., N.Y.) to place the administration in the Department of the Interior failed even though the Chairman of the Subcommittee on Fisheries and Wildlife Conservation, John Dingell (D., Mich.) stated that he personally was in entire agreement. He said, "This matter should be handled by the Department of the Interior. I do not believe the Department of Commerce is any place where an important judgment like the preservation of major marine mammal species should be decided. I believe that the public would be much better served by having the Department of the Interior make that decision." Nevertheless, because the Committee insisted on giving most of the jurisdiction to the Department of Commerce, Congressman Dingell stated he would have to vote against the amendment, and he did so. Congressman Alton Lennon (D., N.C.) led the fight against the amendment.

Weakening amendments were opposed by Congressman Dingell, for example, Congressman Nicholas Be-



gich (D., Alaska) sought to extend the subsistence hunting by natives (already provided for in the Committee bill) to allow them to kill marine mammals for commercial purposes, such as the carving of walrus tusks even though they did not eat the walrus meat. Congressman Dingell pointed out that one billion dollars had been provided under the Alaska Native Claims bill. "I do not have before me at this particular minute how much we gave them in terms of land and how much in terms of cash, but with the oil royalties and everything else we gave them, we have many instant millionaires in Alaska now, and I think perhaps they can give up the wholesale carving of walrus tusks. I think we have given them enough." The amendment was defeated.

An important strengthening amendment was offered by Congressman Ogden Reid (R., N.Y.) as follows: "Notwithstanding any other provision of this section, after the expiration of one year beginning on the date of the enactment of this Act, it shall be unlawful to use, on or in connection with any commercial fishing vessel subject to the jurisdiction of the United States, any means or methods of fishing whereby any ocean mammal could be injured or killed in the course of or incidental to commercial fishing operations." Congressman Reid pointed out, "There is much evidence that these friendly and intelligent mammals are being decimated because of commercial fishing practices, particularly in the eastern inter-tropical Pacific area. . . . These mammals become highly distressed when one of their fellows becomes injured, and will not leave it, which is possibly an explanation as to why some porpoises will not leap out of the nets while others are still trapped. . . . the choice we have before us today is whether we are going to insist that the incidental killing of 200,000 to 400,000 porpoises per year is halted by a flat ban, or whether we are to condone the decimation of porpoises by perhaps less than modern fishing practices and procedures."

Congressman Thomas Pelly (R., Wash.) and Congressman Glenn Anderson (D., Calif.), both members of the Subcommittee which drafted the bill, strongly opposed the amendment making many references to the amount of money involved in the tuna business. Congressman Pelly said, "The replacement value of this tuna fleet of 140 vessels is conservatively estimated at \$160 to \$165 million. In 1971, the ex-vessel value of all tuna and tuna-like fish landed in the United States by the U.S. tuna fleet of all sizes was approximately \$100 million. In 1970, the wholesale value of the canned tuna and tuna-like pack and other processed tuna products was about \$383 million. The retail value of the canned tuna packed in 1970 was slightly over \$500 million. . . ." Congressman Anderson noted that the United States imports about \$100 million worth of frozen tuna.

So strong was the opposition to forcing the tuna industry to mend its ways that not only was Congressman Reid's amendment defeated but also a much more modest one presented by Congressman Mario Biaggi (D., N.Y.) which would have allowed the industry a total of five years possible extension of time before the dolphins and porpoises would be fully protected from incidental killing.

Action on the legislation now moves to the Senate.

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### WILD HORSE BILL APPROVED

An Act to require the protection, management, and control of wild, free-roaming horses and burros on public lands was signed into law by President Nixon, December 15, 1971. The new law, P.L. 92-195, declares the wild horses to be under the jurisdiction of the Secretary of the Interior who is authorized to protect and manage them as components of the public lands. He is further authorized to designate and maintain specific ranges as sanctuaries for their protection and preservation.

Senator Henry Jackson (D., Wash.) and Congressman Walter Baring (D., Nev.) were leaders in the Senate and House of Representatives for passage of the law, the second federal law to be enacted for the benefit of these horses. The first Wild Horse Act, passed in 1959, forbids motorized pursuit of Wild Horses and Burros on public lands and the poisoning of waterholes.

### EIGHT SPECIES OF WILD CATS ADDED TO ENDANGERED SPECIES LIST

Secretary of the Interior, Rogers C. B. Morton, proposed eight spotted or striped great cats for the Endangered Species List, February 3, 1972, thus banning further import of any parts or products from these animals into the United States as of March 30th when the listing went into effect.

"The eight species — cheetah, leopard, tiger, snow leopard, jaguar, ocelot, margay and tiger cat — are all being exposed to heavy exploitation by the skin trade," Morton said. "Organized poaching rings flaunt the laws of the countries where these cats originate and send a flow of their furs to feed the fashion salons of the United States and Europe. Also, the habitat of these big cats is being changed so rapidly their survival is becoming difficult at best."

Morton said that when any species of wildlife is faced with possible extinction he would take every action to protect it, under a general mandate given him by President Nixon.

The Fish and Wildlife Service, which administers the Endangered Species program, believes that fewer than 2,000 tigers exist in India today, a reduction of over 90 percent in the last 25 years, while probably no more than 400 snow leopards survive in the entire Himalaya Mountains. Probably no more than 2,000 cheetahs exist in the parks of Africa and even the widespread and secretive leopard is being drastically reduced in numbers across its range. Many African and Asian countries have already prohibited any further hunting and export of these animals.

In Latin America, tremendous pressure is being put on the jaguar and the smaller ocelot, margay and tiger cat. Jaguar pelts in recent years have shown a marked decrease in size, an indicator of overexploitation. New highways pushing into Amazon jungles have opened up formerly inaccessible areas to the hide hunters. Little is known of jaguar population densities, but reliable reports on increasing scarcity attest to the effectiveness of the fur gatherers. Mexico has already banned hunting for all wild cats and other Latin American countries have forbidden their export.

Laws against exporting spotted cat skins from Latin America, Asia, and Africa apparently have little effect on the traffic in hides. Despite the commendable efforts of some U.S. furriers to limit the trade in these cats, the U.S. and European markets remain open and the poachers succeed in getting shipments through.

Morton said his Department can do two things for these cats: "Cut off their importation by placing them on the endangered list, and provide technical expertise for their management in countries of their origin." Stopping the U.S. trade will hopefully influence European countries to quickly do the same. "We must act now," Morton said, "because a world without great cats is unthinkable."

The status of the 28 additional species of wild felines occurring in the world has also been thoroughly investigated to see if they should be listed. At present, these show little evidence of commercial exploitation and appear to be abundant in at least some of their range. "If the hide hunters begin to threaten these species," Morton said, "I'll not hesitate in listing them as well."

Certain cat subspecies had earlier been placed on the endangered list and will remain there: the Formosan clouded leopard, Spanish lynx, Barbary serval and Indian lion.

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### President Issues Executive Order to End Predator Poisoning on Public Lands

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ing birds. I am hopeful that treaty protection can be accorded them in the near future."

A United Press story, February 12, 1972, quoted Secretary of the Interior, Rogers C. B. Morton as saying that the new policy prohibits not only the use of poison on Federal lands but also the use of poisons by Federal personnel who help states and ranchers control predators on privately owned ranches. "Mr. Morton said his department was immediately stopping the distribution of predator poisons and had started receiving poison baits from federally owned ranch lands."

## RULES AND REGULATIONS FOR ANIMAL WELFARE ACT

Minimum standards governing the humane care and handling, treatment and transportation of the estimated 40 million animals covered under the Animal Welfare Act, P.L. 91-579, were published in the *Federal Register*, December 24, 1971. The new regulations were promulgated to cover animals in zoos, circuses, auctions, wholesale pet dealers' premises, and in those parts of laboratories not previously included in the Laboratory Animal Welfare Act, P.L. 89-544, which covered approximately four million animals.

Standards for research facilities now include the following: "It shall be incumbent upon each research facility through its animal care committee and/or attending veterinarian to provide guidelines and consultation to research personnel with respect to the type and amount of tranquilizers, anesthetics or analgesics recommended as being appropriate for each species of animal used by that institution. The use of these three classes of drugs shall effectively minimize the pain and discomfort of the animals while under experimentation."

Space requirements for those animals included in the Laboratory Animal Welfare Act were not changed. However, the preamble states that "within 60 days following the effective date of these amendments the Department will publish in the *Federal Register* a notice of our intent to revise the standards and request data, views, and arguments from the public as to what standards, if any, should be issued with respect to the exercise requirements of animals. The Department will then meet with groups of biological scientists, captive wild animal experts, and animal welfare representatives for the purpose of assembling and evaluating the written data, views and arguments as submitted and all other available knowledge and material to determine the relationship of exercise to the health and well-being of an animal."

Since the Act now covers an immense variety of warm-blooded animals the Department states that it is not yet able to issue specific space requirements for each but will follow the same procedure of seeking and discussing information as in the case of exercise requirements. The present space requirement reads as follows: "Enclosures shall be constructed and maintained so as to provide sufficient space to allow each animal to make normal postural and social adjustments with adequate freedom of movement. Inadequate space may be indicated by evidence of malnutrition, poor condition, debility, stress, or abnormal behavior patterns."

## BOYCOTT OF SEALSKINS THREATENED BY AUDUBON SOCIETY

An announcement February 9, 1972 by the National Audubon Society and Defenders of Wildlife states that "if any commercial sealing is undertaken in Antarctica by any nation, they will immediately undertake to convince Americans to cease all consumption of sealskins, irrespective of the species or origin."

According to the news release, "The decision was made because of an international meeting being held in London, where consideration is being given to a proposed Convention which, in the opinion of these organizations, would open Antarctica to commercial seal hunting.

"Referring to the secrecy surrounding the holding of the meeting — the American public found out only two weeks ago — Charles Callison, Executive Vice President of the National Audubon Society, said that there is 'an element of insult in several governments creeping off to London to discuss sealing in Antarctica, heedless of public opinion.

"The attitude in the United States is hostile toward sealing in the first place. American conservation organizations could be expected to resent this destructive assault on Antarctica, and we do. All of which need not concern other nations — except that we be-

lieve the American market is relied on to make this undertaking profitable.

"There is an implication that Americans, and consumers elsewhere, are mindless receptacles into which the products of a repugnant activity can be poured without fear of rejection. This is not so. If any nation undertakes sealing in Antarctica, we are convinced that *Americans, at least, will not buy.*

"The National Audubon Society,' continued Callison, 'has not opposed regulated sealing in the Pribilofs. But if at the conclusion of this meeting, it appears that sealing will be undertaken in Antarctica, we will attempt to convince Americans to cease use of sealskins and seal products, irrespective of species and origin.'"

## WHALE OIL SUBSTITUTE

Senator Hugh Scott (R., Penna.) author of the Resolution requesting The Secretary of State to call for a ten-year international moratorium on the killing of all species of whales and dolphins, spoke on the floor of the Senate, March eighth on the invention of a whale oil substitute by a young chemist, Alex D. Recchuite at Sun Oil Company's Research Center.

"I cite this incident," Senator Scott said, "as an example of what industry can accomplish when presented with challenges of all kinds, be they environmental, consumeristic, or other. This is how one company met its responsibility to the environment and to its customers."

In an article from The Sun Oil magazine entitled, "Giving the Whale a Fighting Chance," Bud Davis describes what happened. "At the time the ban on whale imports was announced, sulfurized natural sperm oil was the only known substance which could give these oils the required resistance to high temperatures and pressures. Without it, a sizeable amount of machinery in the U.S. might literally grind to a halt.

"In anticipation of the ban, many researchers began looking for a sulfurized sperm oil substitute. One such scientist was Alex D. Recchuite, a young chemist at Sun Oil Company's research center in Marcus Hook, Pennsylvania.

"Late in September 1970, Mr. Recchuite discovered how to make a synthetic sulfurized sperm oil. 'Sun sells more than 50 products containing sulfurized sperm oil — mainly industrial lubricants — and we knew an embargo could be instituted at any time,' he explained. 'So our gear oil lubricants group started looking for a substitute early in 1970.'

"I got involved in the project in a roundabout way. The gear oil group was testing everything on the market — unsulfurized as well as sulfurized sperm oil substitutes. I was in the research center's metal working group at the time, but the men in gear oils asked us to help out because we had more experience with sulfurization.'

"At first, all Mr. Recchuite did was sulfurize the straight sperm oil substitutes that were brought to him. But each time, he became more involved in the project. 'A few of the substitutes seemed to have the right properties,' he noted, 'but they were very costly. Others were easily sulfurized, but would not dissolve in the base oil. Still others were very difficult to sulfurize at all.'

"Then one day Mr. Recchuite came up with what he calls a 'harebrained idea' for a synthetic product that would be inexpensive, easily sulfurized, and soluble in a variety of base oils. With the help of his co-worker, Edward Jolly, he made some of the product and took it to the gear oils laboratory for testing. 'To our surprise it worked just fine.' He recalled as though he was still surprised. 'So we applied for a patent.'

"The process was licensed to Mayco Oil and Chemical Company of Bristol, Pennsylvania, a firm with extensive experience in sulfurization and the ability to get the discovery into commercial production quickly.

"It is now being marketed by Sun and many other firms under the trade name Maysperm."

## ANIMAL WELFARE INSTITUTE

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## STOCKHOLM CONFERENCE VOTES 53-0 FOR 10-YEAR MORATORIUM ON WHALING

A special report to *The Washington Post* with a date-line Stockholm, June 9, begins: "The U.S. delegation to the 112-nation environment conference here won a victory today for their proposed 10-year worldwide moratorium on commercial whaling.

"The American proposal—considered by many skeptics as a test of whether anything could really be accomplished at this international meeting was approved by a vote of 53 to 0, with only Japan, Brazil and South Africa abstaining.

An article by Walter Sullivan in *The New York Times* the day before reported on a rally held June 8: "The crusade for a resolution drew an oddly assorted group of environmental protectors out into the Swedish countryside last night to hear the lugubrious cry of whales across the pine-studded landscape.

"The group included United States Government representatives, and their host was the Hog Farm Commune from New Mexico.

"The common objective is approval of a proposal, placed before the United Nations Conference on the Human Environment on American initiative to appeal for a 10-year moratorium on commercial whaling.

"If the resolution is passed, the International Whaling Commission, which meets in London late this month, will find it hard to ignore.

"The commission is composed of 14 nations that have been active in whaling. Because of the decline in whale populations, only Japan and the Soviet Union now conduct large-scale hunting.

"The whale cries were generated, both from tape recordings and by human imitation, at a demonstration last night that brought conference officials and delegates to the Hog Farm Commune's encampment on the city's outskirts. The Hog Farm is a traveling group of American youths who live in buses.

"Maurice F. Strong, the dapper Canadian who is secretary general of the United Nations conference, mounted the rough-hewn platform and made his way through garishly clad youths to a microphone that moaned in the brisk wind.

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## ACTION IN THE U.K. TO PROTECT THREATENED SPECIES

*Bill To Ban Whale Products Introduced  
In British Parliament*

On May 16th, Sir John Langford-Holt, M.P. from Shrewsbury, moved "that leave be given to bring in a Bill to prohibit the import of whale products into the United Kingdom." Five other members of Parliament joined in bringing in Bill 140 which proceeded to second reading on May 19th. Sir John stated "I envisage that there will be little or no opposition to the proposals in the Bill except that which may come from the Government. The Government's position briefly is this. Control of the excessive killing of whales—and here I quote from a letter from the Department of Trade and Industry to the Royal Society for the Prevention of Cruelty to Animals—'is most effectively to be had by the exercise of restrictive measures by the International Whaling Commission.' In these circumstances, the Commission merits our attention. It was set up by the whaling industry because its staple product, which was the blue whale, was declining at the end of the war so seriously as to make the whaling industry begin to think that it was uneconomic. Decline in other whales—the finback, the sei whale and the sperm whale—has followed.

"In 1963—11 years ago—the International Whaling Commission approved something which I should have thought was absolutely vital in a matter like this, and that was an observer system. It has not come into effect, although many years have elapsed, because, to put it bluntly, one country will not allow observers from another country to be on board its whaling ships or factory ships to see that the regulations of the Commission are carried out. We understand from the Government, however, that they are pressing for the introduction of an observer system.

"The regulations of the International Whaling Commission are being ignored either in whole or in part. At the 17th annual meeting of the Commission, which would be about five years ago, a ban was put on factory ships catching whales between the latitude 40 degrees south and 40 degrees north. That on the face of it seemed a good idea. The problem was that it was objected to by three countries. Three countries in an international agreement raising objection is apparently



A bus decorated to look like a whale led a group of about 2,000 persons in a demonstration supporting the 10-year whaling moratorium.

not many, but in this case the three countries are the only countries which kill whales in the area between 40 degrees south and 40 degrees north, so the objection became a great deal more important. But that is the sort of control which the Government believe is the most effective means of preventing the over-killing of whales.

"We are told that the blue whale today is totally protected by the International Whaling Commission, but the fact remains that in 40 years—during 23 of which the Commission has been in existence—the population of blue whales has dropped from about 150,000 to near extinction. Not only has this evasion of the Commission's rules and regulations been conducted in an overt manner but it has been done rather more stealthily. Japan, perhaps the biggest killer of whales in the world, has an interest in a whaling company in Brazil. The Japanese interest is only 45 per cent, so it is, in fact, a Brazilian company. But Brazil is not a member of the Commission, so the activities of the company, in which Japan is such a large shareholder, do not come under the regulations of the Commission.

"The opinion of the Food and Agriculture Organization is that it looks as though things are improving. All I can say to that is that most of the evidence is to the contrary. I know of no other authority in this country or abroad which takes that view—the Royal Society for the Prevention of Cruelty to Animals, for instance—and the International Society for the Protection of Animals. Dr. Cumming, who works for the United States Navy in San Diego, says: 'The blue whale population is at an all-time low—as is the population of all species of whales.'

"Why at this time should I introduce this Bill? The decline in population of whales has been steady, and the only evidence called to suggest that the situation is satisfactory is that of the FAO. Her Majesty's Government say that the importation of whales into the United Kingdom is relatively small. That means presumably that it is not an industry or trade vital to our well being. But it is vital for the survival of whales. The United States has taken a remarkable step and has certainly given a lead by abolishing completely the importation of whale products. Yet the United States had probably about 30 per cent of the industry. We have about another 10 per cent, and it is my contention at least that the imposition here of a similar ban on imports would have a decisive effect on the trade as a whole.

"Everything of a whale is used, down to its teeth. Cat and dog lovers—indeed, all animal lovers—might like to know that cats and dogs eat 7 per cent of whale imports in a year. From whales comes the manufacture of such things as lipsticks, margarine, shoe polish, candles, soap, and, oddly enough, bicycle saddles. In my view, the only opposition in the House that one could expect to the Bill would be from the Government. Otherwise the Bill could get through easily and quickly.

"There are moments when a lead is decisive for those of us who wait and a credit to those who give it. I believe that this is such a moment.

"Question put and agreed to."

Sir Charles Taylor of Eastbourne joined in bringing in Bill 140. Speaking in the House of Commons on May first he said in part, "Whales are killed by air explosive harpoon. This is a barbarous and inhumane practice which is strongly condemned by every animal protection society in the world."

Mr. Anthony Stodart, Minister of State for Agriculture, Fisheries and Food, for the Tory Government argued against the demands for increased whale protection. Like the American government prior to the Hickel action placing the commercially hunted Sperm and Baleen whales on the Endangered Species List, the British Government at present persists in defending the feeble actions of the International Whaling Commission, an organization domiciled in London in a tiny office, part of a vast government building and run by a part-time ex-civil servant.

Mr. Stodart cited a Sub-Committee of the International Whaling Commission who reported in 1961 that "the improved explosive harpoon often produced instantaneous death and in other cases had so considerably reduced the time a whale took to die that any other method was likely to be less humane." In this connection, the report of Dr. Harry Lillie, who sailed as a surgeon on a whaling ship and observed the operation of the explosive harpoon is worth quoting: "The

present day hunting harpoon is a horrible 150 pound weapon carrying an explosive head which bursts generally in the whale's intestines, and the sight of one of these creatures pouring blood and gasping along on the surface, towing a 400-ton catching vessel by a heavy harpoon rope, is pitiful. So often an hour or more of torture is inflicted before the agony ends in death. I have experienced a case of five hours and nine harpoons needed to kill one mother blue whale."

Commercial interests will continue to fight the moratorium which is so clearly needed to allow the populations of whales to recover and to find a decent, humane method of killing to supplant the inexcusable horrors of the explosive harpoon:

#### *F.O.E. Demands Action*

The work of Friends of the Earth, Ltd., 9 Poland Street, London, W1 3DG deserves support. This organization has sought effective protection for wild animals and recently issued an "Endangered Species Campaign Manual." A hard-hitting, factual report, it details under the heading, "Government Action," the recent orders relating to the Spotted Cats.

"On March 27th, 1972, after six months of pressure from FOE members and conservationists worried about the ineffectiveness of the voluntary ban, Mr. Anthony Grant (then Under Secretary of State for Trade) received a FOE deputation arranged by James Johnson, M.P. At that meeting, FOE put the case for immediate import control and the introduction of an Endangered Species Act.

"After the meeting, the DTI issued the following press notices:—'**BAN ON IMPORTS OF SKINS OF ANIMALS IN DANGER OF EXTINCTION**—The Department of Trade and Industry today issued orders banning the import of tiger, snow leopard and clouded leopard skins. In addition, the regulations on the import of all species of leopard and cheetah skins will be strengthened.

"These restrictions have been introduced in the interest of conserving the species concerned.

"Replying to a question by Mr. James Johnson M.P. (Kingston-upon-Hull West) in the House of Commons today, who asked the Secretary of State for Trade and Industry, if in the interest of conservation of endangered species, he will control imports of the skins of the tiger, leopard (including the snow and clouded leopard) and the cheetah, Mr. Anthony Grant, Parliamentary Under Secretary of State for Trade said: "With effect from midnight March 27th, imports of furs, skins, rugs and coverlets obtained from the tiger and the snow and clouded leopards will be prohibited. Imports of such goods obtained from all other leopards and the cheetah will continue to be permitted, but only where we are satisfied that they have been legally exported from the countries of origin, in accordance with local conservation requirements.

"It was obvious to everyone present at the Press Conference, that with the banning of furs, skins, rugs and coverlets obtained from these three cats, British complicity in their demise would be removed. Journalists and conservation groups (although the latter wanted the ban extended) saw the announcement by Mr. Grant as an encouraging first step.

"However, on the actual DTI Order, Mr. Grant's wording has been somewhat amended. The appropriate section reads:—'On and after 28th March, it will no longer be possible to import under the Open General Import Licence the following: Raw, tanned or dressed fur skins (other than tanned or dressed fur skins assembled in plates, crosses and similar forms) or rugs or coverlets made from fur skins of the following species:

Clouded Leopard	(neofelis nebulosa)
Snow Leopard	(uncia uncia)
Leopard	(panthera pardus)
Tiger	(panthera tigris)
Cheetah	(acinonyx jubatus)

"The document goes on to explain that licences to import leopard and cheetah skins could be granted if the skins were accompanied by certificates of legal capture. "The important difference between what Mr. Grant said and did, is to be found in the documents quoted above. Mr. Grant said that 'furs, skins, rugs and coverlets' obtained from (for instance) the tiger would be banned. By using the two separate terms 'furs' and 'skins', the public servant responsible for Trade convinced the public that the ban was a comprehensive one—that it would cover what the public understood it to cover, i.e. goods which are made up from tiger skins,



as well as un-made up tiger skins. In that tiger skin coats are furs and made of tiger skins, both of which were to be banned, there appeared to be control of the importation of tiger skin coats. This was the way Mr. Grant's announcement was read and this was the way it was intended to be read.

"However, the actual Order appears specifically to exclude skins made up into plates, let alone coats. And when Friends of the Earth asked the DTI whether this was the case, we were told that the ban does not cover fur coats: the controls covered two things:—

- a) raw fur skins
- b) rugs and coverlets

"What was reported by *all* the Press as a meaningful step in the right direction, was actually an enormously successful public relations exercise, which will result in made up coats coming into the country, rather than raw skins. The only thing that has changed, is that millions of people now believe that the U.K. has outlawed the importation of tiger skin (and snow and clouded leopard skin) coats.

"We have done no such thing."

FOE states, "Not only does our law on wildlife conservation look shoddy and mean beside such measures as the Endangered Species Act in the USA, but it is also a weak position from which to urge others to place the values of conservation above commercial self-interest."

Under its "OPERATION ADOPT-A-SPECIES" FOE urges individuals to learn all they can about one of the endangered species and write to the government officials who can take the needed action.

### MARINE MAMMAL PROTECTION DUE FOR SENATE VOTE

On June 15th the Senate Commerce Committee reported on S. 2871, the Committee's new version of the controversial bills to protect marine mammals. The views of the Committee were not unanimous, and the Committee Report included additional, supplemental and minority views. Senators Philip Hart (D., Mich.) Robert Griffin (R., Mich.) and William Spong (D., Va.) presented additional views. The statement by Senators Hart and Griffin noted in part, "The Administrative discretion allowed by S. 2871, we would argue, should be exercised by the Secretary of the Interior, whose department has expertise in the conservation of wildlife, rather than by the Administrator of NOAA, [National Oceanic and Atmosphere Administration] whose parent department has a commercial orientation. While it may be that NOAA has done a creditable job thus far without interference from the commercial interests within the Department of Commerce, this does not justify preserving the possibility of such interference when it could be eliminated by granting the Department of the Interior sole jurisdiction."

Senator Spong wrote, "Although the bill reported by the Committee represents an improvement in existing authority to curb the taking of marine mammals, I am apprehensive over those sections of the measure relating to the importation of such species.

"The House version of this legislation sought to dampen the American market for seal skins by permitting imports solely for processing. Such imports could be admitted only under a bond requiring that they be exported within two years. There is no comparable provision in the bill approved by the Committee. Instead, the measure gives broad authority to the Secretary of Commerce to waive the provisions of the moratorium section of the bill so as to permit the taking of ocean mammals, and to allow both imports and exports.

"Such broad administrative discretion might be acceptable if it were to be exercised by the Department of the Interior. That agency, in my view, is oriented toward the conservation of wildlife. The Commerce Department has a history of being oriented toward commercial development.

"Jurisdiction is divided under the Committee bill. The Department of Commerce (NOAA) would have authority over seals, whales, and porpoises. Interior would administer the legislation as it relates to walrus, sea otters, manatees and polar bears. In my judgment, jurisdiction should not be divided. I believe authority would be more appropriately vested entirely in the Department of the Interior. I voted accordingly within the Committee, but the amendment to give jurisdiction to the Interior Department was defeated.

"The discretionary provisions of the permit section

of the bill are especially troublesome if jurisdiction is to be entrusted to the Commerce Department. Under the Committee bill, a person having a permit to take marine mammals must be afforded an opportunity for a hearing whenever the Secretary proposes to modify, suspend or revoke such permit. In other words, if a permittee wants a hearing, he must be given one.

"However, there is no requirement for a hearing which may be requested by a person opposed to the original issuance of a permit. This seems to me to be inconsistent, and unfair. If a hearing is not required for the issuance of a permit, it should not be required for a revocation, modification, or suspension of a permit, despite the economic interest that may be involved. A hearing ought to be required in both instances if affected or interested persons want a hearing."

Senator Ted Stevens (R., Alaska) consistently sought throughout hearings held both in Washington, D.C. and in Alaska to obtain approval of a weak bill. After it had been seriously weakened he then issued minority views stating that the Marine Mammal Protection Bill "encroaches on state authority to manage resident species." The State of Alaska has already defied Congress by making use of a technical defect\* in P.L. 92-159 to continue mass shooting of wolves from aircraft, contrary to the clear intent of Congress. The complete failure of the Alaska State Fish and Game Department to stop illegal killing of polar bears is well-illustrated in an article published in *The Anchorage News*, April 3, 1972, which appears below under the heading "How Guides Can Tiptoe around the State Game Laws."

Amendments to strengthen the Committee bill have been prepared by a number of Senators who propose to offer them on the Senate Floor. Senator Hart will propose an amendment to place full jurisdiction in the Department of the Interior. Amendments 1) to provide a firm cut-off date on the incidental killing of hundreds of thousands of dolphins and porpoises by the tuna industry, 2) to provide a firm five-year moratorium and to tighten the additional ten-year provisional period during which waivers could be issued by the Secretary, 3) to provide for vessel as well as cargo forfeiture for violation of the Act, and to restore the reward of \$2,500 for information leading to conviction of violators, and 4) to end for the period of the moratorium, the United States portion of the Pribilof seal kill, have been prepared by Senator Harrison Williams (D., N.J.) author of S. 2871 in its original form and Senator Fred Harris (D., Okla.) author of S. 1315, the first Marine Mammal Protection Act to be introduced in the Senate. They have been joined by Senator Alan Cranston (D., Calif.), Senator Charles Percy (R., Ill.), Senator Adlai Stevenson, III (D., Ill.), Senator Robert Stafford (R., Vt.), Senator Clifford Case, (D., N.J.) and Senator Robert Taft, Jr. (R., Ohio).

\*The House of Representatives has now passed H.R. 14731 to remedy the defect. See "Amendment to Law Against Shooting Animals from the Air" in this *Information Report*.

### HOW GUIDES CAN TIPTOE AROUND THE STATE GAME LAWS

By DAN GROSS  
Daily News Staff Writer  
(Second of a Series)

Reprinted from *The Anchorage News*, April 3, 1972

Ray Loesche's career as a hunting guide has been hit and miss in Alaska's judicial arena, but the hits haven't been very hard.

He was nailed in 1963 for wanton waste of game meat, found not guilty in 1965 for guiding without a license, escaped a charge of not being present when his client was hunting in 1968 (dismissal), and got pinched in 1969 for failure to punch a moose ticket. Fine, \$25.

But this year it looked, momentarily, like real trouble. Last spring one of his assistant guides, Ron Lawson, and client, Don Breckenridge, shot a brown bear on the Alaska Peninsula after Loesche dropped them off in his Super Cub. Lawson didn't have a license, wasn't a resident, and according to Alaska Hoyle you aren't supposed to do some other things like shooting bear fresh off a plane.

Lawson didn't have something else, the \$1,800 to pay for the fines. Loesche did and paid. Afterward the magistrate in King Salmon told Loesche that if he ever

appeared in court there again he (the magistrate) would confiscate his (Loesche's) airplane.

Loesche's situation got worse. He appeared before a hearing of the Fish and Game Board in Anchorage, up for revocation of his license. But just about the time his case was launched it turned out that the key testimony was hearsay and the case was shelved on a technicality. Hearsay, not usually admissible in court, is generally admissible at hearings.

A local taxidermist revealed recently that "one of the bandit guides worked for Egan's re-election, got some money coming in and received promises that the governor would ease up on the harassment of some of the guides by the fish and game enforcement division."

Who the guide might be is anybody's guess.

But in a piece of literature sent out by Loesche to some of his clients, he said.

"There were a total of 300 (polar bear) permits drawn Sept. 4 (1970) . . . Not one of my hunters was drawn.

"Now for new developments. Prior to the election, gubernatorial candidate Bill Egan assured a number of Alaska guides that if he were elected, he would throw out the current basis for issuance of polar bear permits for the coming season. As a result, a number of us did what we could to help him get elected. He was successful and will take office in December. He still assures us that one of his first actions will be to make the necessary changes and the season will be open. So, we are going ahead and confirming our hunts, and getting signed permit applications on hand, so we are ready to comply with whatever the new regulation is going to be. So, get in touch and let's have these polar bear hunts confirmed and ready to go when the time comes. We do have space available."

The political animal also plays the game in another way, juggling seasons, closed and open areas, not necessarily for the benefit of the animals.

Recently the Kodiak Island brown bear season was extended five days by "emergency" order of the Fish and Game Board.

The reason is a mystery.

One source offered the suggestion: "Ask (Fish and Game Commissioner Wallace) Noerenberg. It's probably one of his friends or Egan's who can't get up here in time for the regular season. With spring and fall seasons there are 70 days to hunt bear there and there's not one damn biological reason to extend it five more days."

The emergency order itself, however, gives a reason. It says that the Kodiak bear (shot as vermin by island ranchers and, together with the Alaska Peninsula bears, subject to the most intensive pressure on any of the big bruins on the North American continent) is underharvested. The order was recommended by the Kodiak Advisory Board. It may be only incidental, but Oscar Dyson, chairman of the Fish and Game Board, lives on Kodiak Island.

While politicians may play games with game, guides on the Arctic coast have boiled their procedures down into a science. There are roughly five methods used to bag a white bear. Here is a brief do-it-yourself guide.

ONE. A non-resident hunter has money but no polar bear permit. A resident has a permit but not enough money to afford the hunt, so a guide takes both on a hunt in two planes. They get back and the resident claims to have killed the bear. Guide pays off resident. The hide later is handed over to non-resident.

TWO. The guide buys the permit from someone who has drawn one fairly. Black market cost—\$500 to \$1,000. The hunter claims to be going on a photography sightseeing trip or a wolf hunt and kills the bear. The hide is skinned and cached out on the ice. Later the guide gets original permittee to sign the paperwork. Hide is then relayed through taxidermist to the hunter.

THREE. Guide tells the hunter he has a permit the hunter can use. The hunter, who doesn't know any better, kills the bear. The guide then has the second plane conceal the skin, then gets the hunter out of town before he can do any barroom bragging. The guide then ships the hide to a taxidermist for shipment to the hunter.

FOUR. The biggest. Taxidermists, mostly outside

firms, sometimes working with guides, work together with other taxidermists. The hunter shows up at the taxidermist and says. "I don't have a permit, but I want a bear and am willing to pay for it." The taxidermist checks out the hunter to make sure he is clean, not a ringer for state or federal enforcement agencies. The taxidermist then bargains with a guide for a kickback. (They usually average around \$1,000), or extracts a promise of getting the trophy contract. The hunter comes to Alaska for a wolf hunt or photographic outing. Some of these "photographers" who are investing upwards of \$3,000 on their expedition have been seen carrying Instamatics.

The hunter is met at the village, flies out, kills the bear and the skin is shipped out of state as "wolf hides" or "personal luggage."

FIVE. Guide takes out the hunter who has honestly drawn a permit. Hunter kills trophy. The party later spots a bigger bear and the hunter says "I'd rather have that bear." Guide says, "Okay, but it will cost you more. I have a permit to get a bear for a museum and we could use it for the first bear." Hunter kills the second bear, pays the extra tab. Guide peddles the first on the black market, \$600 to \$1,500 green or between \$2,000 and \$3,000 finished.

### AMENDMENT TO LAW AGAINST SHOOTING ANIMALS FROM THE AIR

On June 5th Congressman John Dingell (D., Mich.) successfully moved to suspend the rules and pass H.R. 14731 to amend the Fish and Wildlife Act of 1956 in order to provide for effective enforcement of the sections prohibiting shooting at animals from aircraft.

The bill passed last year, P.L. 92-159, has not succeeded in halting the practice because no specific agency was given authority to enforce the Act. The Dingell bill places responsibility in the Department of the Interior. Hearings on the bill were held in the Senate Commerce Committee June 29th.

### Stockholm Conference Votes 53-0 for 10-Year Moratorium On Whaling

(Continued from page 1)

"The plight of the whale, faced with extinction, anticipates that of man himself, Mr. Strong said. The long-range purpose of the conference, he added, is to enable man to avoid such a fate, and he urged the youths to continue goading the conscience of the world's governments.

"Mr. Strong's remarks reached across the generation gap and his audience rich in beards, long hair and blue-jeans, gave him an ovation. After the reading of a poem, part of which was ostensibly written by a whale, with prolonged moans and groans, Walter J. Hickel, former United States Secretary of the Interior, climbed onto the floodlit platform.

"He was introduced by Stuart Brand, wearing a plumed top hat. Mr. Brand was author of "The Last Whole Earth Catalogue," which won a National Book Award this year. Mr. Hickel said it would be a crime beyond belief if in the same decade that man walked on the moon he also destroyed the largest creature on earth."

"Today one of the Hog Farm buses, draped in black plastic of the refuse-bag variety to resemble a whale, led a parade through Stockholm, followed by youths carrying flowers and either making whale noises or crying 'Val! Val!' the Swedish word for whale and the ancient cry of Norwegian whalers.

"While the Soviet Union has boycotted the conference in protest at East Germany's exclusion as a voting participant, Japan is here and fighting the ban. A Japanese amendment to the recommendation would limit the prohibition to 'endangered whale stocks.'

"This, in the American view, would open a loophole large enough to make the resolution valueless."

Fortunately, the Japanese failed to influence the conference. According to *The Washington Post* the cause of the whales "has won enormous and extremely emotional international support, and this expression of so firm an opinion by so nearly global a body has come only a few days before the International Whaling Commission is to meet in London."

### ANIMAL WELFARE INSTITUTE

Scientific Committee on Humane Standards for Research Animals

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Lee R. Dice, Ph.D.

Paul Kiernan, M.D.

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## HIGH SCHOOL STUDENTS CONTINUE CRUEL EXPERIMENTS DESPITE "SUPERVISION"

Extensive documentation of high school experiments causing pain, fear, suffering and death to vertebrate animals was given in an article by F. Barbara Orlans, Ph.D. in AWI Information Report, Vol. 17, No. 2, April, May, June, 1968. Dr. Orlans has completed a new study since rules have been widely circulated by Science Service, administrators of Science Fairs, and the National Society for Medical Research requiring that "a qualified adult supervisor who has had training in the proper care of laboratory animals *must* assume primary responsibility for the conditions of any experiment that involves living vertebrates." The results show that the *majority* of science fair experiments on vertebrate animals hurt or kill the animals. Supervision is not the answer. Effective action must be taken to stop the needless suffering inflicted by untrained incompetent youths on defenseless animals in the name of science. Science Fairs should be boycotted until adequate rules are established and enforced. Rules should prohibit high school students from conducting projects involving infliction of pain on warm blooded animals and, under no circumstances should experiments involving these species be conducted in students' homes.

Below is a listing of *all* projects involving use of warm-blooded animals in eight science fairs in 1970, 1971, and 1972†.

### Washington, D.C. Area Science Fair, April 18, 1970

"*Vitamin A Deficiency in Hamsters*," grade 9, Taft Jr. High. Home.\* No sup.\*\*

Death was produced in one adult hamster and blindness in another by feeding diets deficient in vitamin A. Both animals were on display. The dead animal had half of its head eaten away, cannibalized by its starved, blind, one-time cagemate. The blind animal was still being maintained on the deficient diet.

"*Cigarette Smoke and Mental Health and Physical Hang Up*," 7th grade, Paul Jr. High. Home. No sup.

The student's report stated, "The mouse was fed nicotine on everything, the air he inhaled was full of cigarette smoke. He finally died from this. It took three days for him." Elsewhere, the report stated that the animals were unable to stand up straight after exposure to the smoke.

"*Cigarette Smoke on Guinea Pigs*," 7th grade, Backus School.

A guinea pig was placed in a smoke chamber which was filled with cigarette smoke, and it remained there until it died.

"*Three Slow Mice: See how they Walk*," 9th grade, Hamilton School.

Mice were subjected to varying concentrations of carbon monoxide, a lethal poison, to see how this affected their ability to run a maze. The limitations of equipment alone rendered this project totally impracticable, as the student had no way of determining the concentrations of poisons to which the animals were

†Note: Dr. Orlans writes: "All the fairs that were visited are reported on. There has been no selection of 'good' or 'bad' ones. The similar pattern of animal use shown in fairs surveyed suggests that this sample is representative of science fairs throughout the country. Indeed, if anything, this sample may well represent better than average national standards of animal use because three of the eight fairs represented had been reported on in the past, and therefore could reasonably be expected to have improved standards as a result. For space saving reasons, only those aspects of the projects relevant to the purpose of the study are reported. Projects which did not involve distress to animals are reported either by title alone or in the briefest possible terms. This should not be interpreted as belittling the abilities or achievements of the students who presented humane projects."

\*"Home," or, where appropriate, "School," or "Research Institution," denotes the location where the project was conducted.

\*\*The abbreviation "sup." means "supervision."

## REPORT ON THE INTERNATIONAL WHALING COMMISSION MEETING

by Tom Garrett

Wildlife Conservation Director of Friends of the Earth

On June 26, only two weeks after the passage of the U.S. resolution at Stockholm calling for a ten year moratorium on all forms of commercial whaling, the International Whaling Commission convened its 24th annual meeting in London. I attended the conference as an "advisor" to the U.S. delegation, and was able to observe, and in an extremely minor way participate in, the conference.

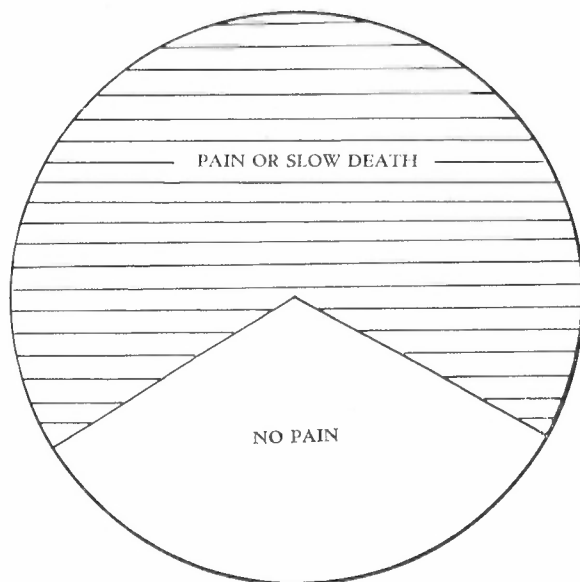
The delegates, for the most part the same men who have attended IWC meetings for years and compiled the shameful, tragic record of the IWC, shrugged off the results of Stockholm and conducted business as usual. Two long-delayed reforms, the replacement of the Blue Whale Units by species quotas, and an "international observer" scheme were put into effect. Under the constant prodding of U.S. Chairman Russell Train, some small reductions in some quotas were agreed upon. But of the fourteen nations attending, only the U.S., Mexico, Argentina and the United Kingdom supported a moratorium on whaling. Australia and Norway, whose governments voted for the whaling resolution at Stockholm, opposed it in London.

The first act of the Commission in its opening plenary session, after the delegates had run the gauntlet of Friends of the Earth (FOE) pickets, led by Angela King of FOE Ltd's London office, was to eject the press. A U.S. resolution to re-admit newsmen failed to receive a second. Dr. J. M. McHugh of the U.S. the chairman of the IWC, then dutifully warned delegates and observers not to divulge the proceedings to the press or public.

The proceedings, within technical committee sessions and later plenary sessions, then fell into a pattern. The Japanese delegation, consisting of the owners of the major Japanese whaling companies and led by former IWC chairman and President of the Japan Whalers Association, I. Fujita, vehemently opposed any attempt to reduce quotas. He was supported closely by the Soviet Union, by the delegate from Panama who showed startling enthusiasm for the Japanese cause, and by South Africa, Australia, Norway and generally Iceland. The Canadian delegate, Dr. Sprules, who had been expected to support the U.S. position on the basis

(Cont. on page 6)

USE OF WARM-BLOODED ANIMALS IN HIGH SCHOOL PROJECTS



Showing that of the total 89 projects involving the use of warm-blooded animals, 58, or 66%, involved infliction of pain or lingering death, and 30, or 34%, were non-injurious to the animals.

exposed. On display was a dead, pickled mouse labeled "A Victim." Awarded 3rd Place.

"Lead Poisoning," 8th grade, Gurnell Patterson Jr. High.

Mice were subjected to lead poisoning, a well-known lethal poison. Live mice were on display which were provided with no food. Awarded 1st Place.

"Studying Diet Deficiency in Mice," 9th grade, Backus Jr. High. Home. No sup.

Four mice were fed inadequate diets and two additional mice were given adequate rations. However, all six animals died. The student's report states: "I have found that bad nutrition causes diarrhea, a loss of hair . . . a breakdown of their health. . . The problem I had was keeping the animals alive."

"Malnutrition—Learning and DNA," 10th grade, Gonzaga School. Home and school. Sup. by teacher.

A young rat, kept at the student's home in "starving conditions" for many weeks, showed no increase in body weight and did not run a maze with as much proficiency as did a well-fed animal which tripled its body weight over the same period of time. In other work, undertaken at school, an animal, diseased by feeding it a vitamin deficient diet, was similarly shown to be a poor maze runner. Awarded 2nd Place.

"Trypanosoma lewisi," Gonzaga School. Home. No sup.

The student obtained one diseased rat, infected with *Trypanosoma lewisi*, a parasite which lives in the blood and is transmitted by lice, from a local university, and proceeded, at home, to make other rats similarly diseased by transferring blood from one animal to another. He said his parents helped him to hold down the animal while he took blood samples. The student had no idea what type of disease he was dealing with and could not describe the symptoms when asked, beyond saying, "The animals don't move around." Some of the diseased animals died and were cannibalized by their cagemates. Awarded 1st Place.

"Effects of Drugs and Alcohol" (sic), 7th grade, Our Lady of Victory School. Home. No sup.

The student reported that for 6 weeks he "fed the mice food pellets loading (sic) with alcohol (sic) . . . we also started 'pep pills' mixed with food grains . . . By now the mice were trying to break the glass of the aquarium." Awarded 1st Place.

"Cat Talk," Home. No sup.

The student repeatedly tried to produce pain in her pet cat to obtain a tape recording of the animal's distress cry.

"Effect of Sunflower and Pumpkin Seeds on Albino Rats," Entry No. 15.

During the course of the experiment, which, in itself, did not inflict harm, the animals killed and cannibalized each other in considerable numbers. This was due to improper caging.

"The Adjustable Rat," 8th grade, Entry No. 8.

On display was a live rat, whose body length was about 6 inches, confined in a grossly inadequate cage measuring 8x6x6 inches. The animal could barely turn around. The experimental procedure itself, however, was not designed to cause the animal harm. Awarded 1st Place.

"Protein Nutrition in Mice," Entry No. 5.

Animals on display with no water.

"The Effect of Different Wavelengths of Light on the Activity of Mice," Home. No sup.

"Photoperiodic Treatment and the Eating Habits of Gerbils"

### 13th Annual South Shore Regional Science Fair Region 5, Bridgewater, Mass.,

April 3 and 4, 1971\*

"Does DDT affect the Vitamin A content of Mice?," 15 years old, Stoughton High. Home. No sup.

Mice were deprived of drinking water and thus obliged to drink a solution of the insecticide DDT. The animals became progressively ill, developing dishevelled fur, ragged ears, and black spots around their eyes. The experiment was continued for 41 days by which time two of the three animals were dead. The student concluded, "DDT has adverse effects on the body." There were no estimations of the vitamin A content of the animals, as might have been suggested from the title.

"The Effects of Testosterone on the Reproductive Physiology of the Mature Female Rat," Brookline High School. Home and summer camp. No sup.

At an Explorer summer camp, the youngster was "shown" by a medical student how to remove the ova-

ries from animals. On returning home she attempted this surgical operation alone and unaided in her home kitchen. Awarded 3rd Prize, which qualified the student to exhibit the project again at the state science fair.

"The Reversal of Atherosclerosis by Cholesterol-Catabolizing Agent," (mouse, analysis of blood) Research Inst., Sup.

"Nutrition," (Hamster, activity with extra vitamins).

### 22nd Annual Massachusetts State Science Fair

April 16, 17, and 18, 1971\*

"Pollution as a Factor in Essential Hypertension in Anesthetized *Macaca mulatta*," 11th grade, St. Ann Academy. Research Inst. Sup.

Two monkeys were obliged, through lack of an alternative, to drink salt water until they became very weak and refused to eat. The monkeys' blood pressure fell, and the student concluded that the salt had caused kidney damage. Then, for 51 days, one of these weak monkeys was fed cadmium acetate, a substance which causes intense pain when eaten by humans and doubtless causes similar pain in monkeys. The human disease resulting from eating cadmium is known as "Itai, itai," Japanese for "It hurts, it hurts." Humans and animals can die from its ingestion. The monkey, as a result of this treatment, suffered persistent high blood pressure and permanent kidney damage. These demonstrations of well-established facts were conducted, presumably at the public's expense, solely for the purpose of providing the youngster with a competition project. "The Relationship between population Density and Social Pathology in Mice," 12th grade, South Boston High School. Home. No sup.

Sixty mice were housed in an inadequately sized cage and their survival rate compared with others housed in spacious cages. In the overcrowded cage, many of the animals were "eaten alive," according to the student's report. Survival rate of several litters were determined; typical results were that out of 11 babies born, 2 survived; eight babies born, 2 survived; two babies born, none survived. The babies were cannibalized. One animal, the report said, "had a sore the length of its back" due to other animals attacking it. At the time of the exhibition, the animals were still being maintained in these conditions, and the student's stated intention was to continue, presumably with the object of gathering material for next year's fair.

"The Effects of Sensory Deprivation on Rats in a Learning Task Situation," 11th grade, Boston Latin School. Research Inst. Sup.

A total of 16 rats were placed individually in a small box, measuring 8x8 inches, for periods ranging from 1-10 weeks. The box was designed to deprive the animal of any incoming sensations; it was padded to prevent sounds from entering and admitted no light. The animals were provided with "automatic" feeding and watering devices, which, on occasion, did not work; this resulted in the death of two animals from water deprivation. The object was to show that sensory deprivation impairs learning ability. On removal from the deprivation box, the animals that survived were subjected to non-painful electric shocks to see if they could learn a task.

"Pesticides and Insecticides," Salem High School.

On display were two dead mice, presumably victims.

"The effects of 'Eskatol' on *MUS SP*," 10th grade, Oxford High School.

Seven mice were given the drug "Eskatol" as a result of which they became aggressive, showed lack of appetite, diarrhea, heavy breathing, insomnia, and one animal died.

"The Effects of Testosterone on the Reproductive Physiology of the Mature Female Rat," (see South Shore Science Fair, above.)

"Milk Deficient Diet," grade 10, Scituate High School.

A rat was kept on a nutritionally deficient diet for 6 weeks until the animal showed a fall in body weight and signs of disease.

"The Effects of Imipraine Hydrochloride on Gerbil Metabolism," 12th grade, Cathedral High School.

The drug, imipraine hydrochloride, was administered to two gerbils. Because of faulty injection pro-

\*These fairs are not affiliated with International Science and Engineering Fair but have their own rules which state, in part: "The Massachusetts State Science Fair Committee takes a firm stand in opposition to all science fair exhibits which involve cruel and abusive treatment of animals, either in the actual demonstrations at the Fair or in the process of being prepared . . . Live animals . . . must not be maltreated." (This footnote also applies to the Mass. State Science Fair.)



cedure, one animal suffered permanent injury to its leg and could not walk correctly. The two animals were on display with no water provided.

*"The Effects of Inanition and Realimentation on the Hepatic Composition of Rats"* (rats killed painlessly), Research Inst. Sup.

*"Electrical Stimulaton of the Cardiac Muscle"* (32 mice killed painlessly), School. Sup.

### 13th Annual Charles County Science Fair Maryland, March 12, 1972

*"Biological Effects of Radiation,"* age 17 years, La Plata High. Home. Claimed Sup. by teacher.

The student obtained irradiated food which she kept at home to feed mice. One batch of food had been exposed to 65 Kv for ½ min., another batch 700 Kv for 1 minute. Four animals were fed solely on irradiated food, and at the end of four weeks, three of them were dead as a result. The student recorded the waning health of the animals thus, "One of the mice looks terrible. I think it is going to die . . . It looks terribly skinny." Of another victim, the report stated, "The mouse in group B died. Its skin looks very red and its coat was blotchy." Of the third death, the student's sole observation was that it was female. "Everyone keeps asking me," the student wrote, "if my project was worth doing and if I had any regrets about the mice dieing (sic). I keep saying no to both questions." Her stated intent is to become a veterinarian. Ribbon Award.

*"The Effects of Centrifugal Force on Gerbils,"* age 13 years, Lackey High. School. Sup. by teacher.

"With this project I will demonstrate some of the possible effects of centrifugal force of leaving the earth . . ." announced the boy in his report. Accordingly, a gerbil was placed in a tiny cage one inch longer than its body length and was attached to a turntable which revolved continuously 24 hours per day for 16 days. The increasingly adverse effects of this treatment were observed by the youngster, and presumably also by his supervising teacher, and reported in the following terms. The gerbil became "angry and partically (sic) withdrawn, appears unhappy . . . seen to be depressed . . . weak . . . weaker . . . frail." The sick animal and the apparatus used was on display. The grossly inadequately sized cage contained a few wisps of bedding insufficient to cover the floor and a few scattered peanuts, the animal's sole source of sustenance. There were no greens or water provided. The animal was judged to be in such a bad state of health that the only humane course would have been to painlessly kill it.†

*"The Intelligence Test,"* grade 6, age 11 years, Malcom School. Home. No Sup.

One mouse was inadvertently "squashed" to death on arrival home from the pet store; other incompatible animals were housed together and fought until one was killed.

*"The Baby Formula Diet,"* grade 11, Entry No. 21104. Home. No Sup.

Incompatible mice were housed together until they became "badly bitten."

*"Conditioning Reflexes,"* grade 11, aged 16 years, La Plata High.

A rat was permanently deprived of drinking water and alcohol substituted.

*"Conditioned Rodents"* (gerbils, maze).

### 17th Annual Northern Virginia Science and Engineering Fair

Springfield, Va., March 18 and 19, 1972

*"The Effects of a Protein-free Diet on Mice,"* grade 8, Entry No. 8-K-2. Home. Sup. by mother.

The student's stated objective was that "I thought I would produce a paralysis and the muscle weakness that goes with beri-beri." She continues, "This did not happen. Of the eight original mice, only three remain. Two died in the control group. Three died in the experimental group." The control group received a normal diet; the experimental group received a protein deficient diet consisting solely of crackers, raw white rice, and water continuously for 4 months. The student's report is mainly an account of how the animals died. One animal died from a sickness that did not give the student "enough time" to tell what it was. "One [animal] was severely wounded in a fight [with an incompatible cagemate] . . . The skin on his back was ripped entirely open showing his flesh. He should have died almost immediately . . . He was not given any treatment or any medicine. He lasted a long while . . . If he had been on a normal diet he would

have recovered." But he was not; he did not survive. Two other animals died as a result of the inadequate diet. A further two died from the effects of bad husbandry. The profession of this project's supervisor was listed as "mother."

\**"The Effects of Insecticides on Mice,"* age 13 years, Holms Int. School. Home. Claimed Sup. by teacher.

The object of this project was to show that the poisoning effects of insecticides can be transferred (sic) by plants" to animals. Accordingly, two brands of garden insecticide containing Rotenone were sprayed onto leaves which were fed to two mice. The sole observation of the student on one animal was that on the third day it had lost weight, and on the fourth day it died. The total observations made on the second animal were that on the sixth day, it "had trouble breathing and he seemed to have pains every while. He didn't show to (sic) many signs of the pesticide from looking at him." On the next, seventh day, that animal died also. The "supervising" teacher signed the required form stating that this project conformed with the rules for humane animal experimentation. Awarded Second Place.

\**"How Cigarette Smoke Affects the Nervous System of a Mouse,"* grade 8, age 13 years, Holms Int. School. School and Home. Sup. by teacher.

The student's report stated, "I exposed the mouse to smoke at school but did the maze work at home." Each week for five weeks, increasing quantities of cigarette smoke were introduced into a chamber housing the mouse. "The more cigarette smoke the mouse is exposed too (sic) the more nervous he becomes," continued the report. The animal's fur became thin, (a sign of ill-health), and its ability to complete a maze decreased. At the end of five weeks, the mouse's eyes became "covered with a white film." The animal was blind. The required form stating that the animal work conformed to the guidelines was signed by the teacher (the same one as in the previous project).

*"Behavior of Animals Under Certain Conditions,"* grade 8, Holms Int. School, Home, Sup. by mother.

The object of the project was to determine the reaction of seven gerbils kept in overcrowded conditions in an inadequately sized cage. The animals fought each other, and some were "persecuted," according to the report. The project was "supervised" by a lady whose profession was entered as "housewife" and "sponsored" by the teacher (same teacher as in the previous two projects). First Place Winner.

*"Environmental Climate with Mice,"* 12th grade, Entry No. 12-A-1. Home. No sup.

To determine the effects of keeping domesticated mice in a cold climate, two animals were housed at temperatures below 48 degrees F., presumably out of doors. These animals were reported fighting "over the last scraps" of food. The animals finally died, frozen to death. This project was "sponsored" by the teacher.

\**"Acquired Homograft Tolerance in Mice,"* 12th grade, Falls Church High. School. Claimed Sup.

The survival time of mice was measured after receiving skin grafts and various treatments. Most of the operated animals survived the skin grafts from between two to four weeks. Some of the animals rejected their skin transplants. "All of the animals died," said the student. A total of 200 animals were used. The surgical operations were conducted by the student at school. The forms of compliance with animal regulations were signed by a scientist from a commercial laboratory in the vicinity, where the youngster had learned the skin-grafting techniques. The person who was physically present where the animals were housed throughout the course of the surgery and who allegedly supervised the project, was the teacher, who "didn't know anything about skin grafts," according to the student. Awarded First Place, which qualified him to exhibit at the ISEF.

†This project and the similar ones reported below, (see 24th Annual Prince George's Science Fair, and 17th Annual Northern Virginia Fair), may well have been inspired by the high school book published by the National Aeronautics and Space Administration entitled, "Space Resources for Teachers; Biology—including Suggestions for Classroom Activities and Laboratory Experiments," 1969. Page 74 states, "Acceleration Stress. 1) Study the effect of simulated 'g' forces on chicks, using a turntable. 2) Study the effect of simulated 'g' forces on mice, [and other species]."

\*An asterisk appearing before the project title indicates that a compliance form was on display, signed by a supervisor, certifying that the rules governing use of animals had been fully met. Only 17% of these six ISEF affiliated fairs complied with this rule.

*"Project on the Effect of Tranquilizers on Stress Reactions in Mice,"* Entry No. 11-H-1. Home. Sup.

Two groups of mice, each containing ten animals, were subjected to a stressful situation comprising a very loud aircraft noise. The animals were exposed to this for about two hours every day for two weeks, at which time the animals appeared "tense and were unable to sleep." The animals, in their distress, chewed on the wires of their cages. When handled, "they attempted to bite and made frantic attempts to escape." One group of animals was then given injections of a tranquilizer, and the daily noise sessions continued. According to the student's report, the effect of tranquilizers only "intensified the ill effects." A local veterinarian supplied the drug and hypodermic syringe; however, another person, whose qualifications were not clearly stated, was listed as the "supervisor."

*"Nutrition — Vitamin C Deficiency,"* grade 8, Entry No. 8-H-1. Home. Sup. by engineer.

A guinea pig was fed a deficient diet until it showed "great weight loss, very bad breathing, scabs on the paws, and the head was cocked to one side." This project was "supervised" by an "engineer" who built the cage and gave "advice."

*"An Artificial Gill and Mammal Metabolism,"* 9th grade, age 14 years, Entry No. 9-B-1. Home. Sup by civil engineer (father).

The object was to see if an air breathing animal could be maintained alive in an underwater chamber surrounded by a membrane through which gaseous exchanges take place. The apparatus failed after a hamster had been confined to the chamber for 24 hours. The animal slowly died of asphyxiation during the next six hours after removal from the chamber. Another hamster was obtained and the tests continued. The student is currently not taking any science courses. His project was mainly an engineering feat. Grand Prize Winner, which qualified him to exhibit at ISEF. *A project on activity cycles of mice* (title unknown). Home. No Sup.

*"Effect of Two Types of Music on the Learning Behavior of Two Mammals,"* Home.

#### 24th Annual Prince George's Science Fair March 25, 26 and 27, 1972

*"Do We Really Need Vitamin C?,"* age 14 years, La Reine High. Home. No Sup.

The youngster sought the answer to her question by blinding and slowly starving to death three guinea pigs. For this year's project, the student fed one guinea pig a diet free of vitamin C, (an essential nutrient without which animals die). She recorded the course of the induced disease and the death throes as the animal expired. The previous year, when the student was 13 years old, she had done an identical "experiment," killing two guinea pigs. Since she had successfully exhibited those results at the previous year's science fair, she added to the results this year. On show were color photographs of the two previous year's animals, almost furless, lying prostrate, in an advanced state of the disease. Photographs of this year's guinea pig showed progressive emaciation; it became unable to walk, on the 18th day it became blind; on the 19th day, it died. The project was conducted "in my kitchen and in my room." Despite the project's flagrant violation of the rules, it had been exhibited at least three times and had won at least one prize.

*"Effect of Centrifugal Force on Gerbils,"* age 14 years, Entry No. J-222. School. Sup. by teacher.

A gerbil was placed in a tiny cage measuring 5 x 5 inches, (body length of a gerbil is about 4 inches), which was placed on a constantly revolving turntable, the speed of which was progressively increased over the course of 15 days. The student's report stated that the animal "appeared very tired and weak . . . hair does not show glossy color . . . very frustrated, angry, withdrawn, disturbed, afraid of people, huddles in corner . . . eats very little, just enough to stay alive." Awarded Honorable Mention.

*"Effect on Mice of Cigarette Smoke,"* age 12 years, Entry No. J-826, Home. claimed sup. by veterinarian.

A pair of mice, named "Bonnie" and "Clyde," were exposed to cigarette smoke in a chamber to determine the harmful effects. The student said she showed the animals to a veterinarian at the beginning, and again at the conclusion of her project. One of the animals was "sick" at the beginning of the experiment, but apparently the veterinarian had not warned her not to expose this animal to toxic fumes. After a single exposure to cigarette smoke, this animal died. The other animal was exposed to smoke for short periods each

day for two weeks. The deleterious effects included coughing, runny nose and eyes, and nausea. The veterinarian who is responsible for the good health of the animals at this student's school, signed the form stating that this project was in compliance with rules for humane animal use.

*"Do High Doses of Vitamin C Reduce Stress?,"* age 14 years, Greenbelt Jr. High. Home and Medical Office. Claimed Sup. by nurse.

Six mice were "stressed" by being forced to swim either for two minutes or until they began to drown and their heads went under three times, whichever came first. Some animals were then given a massive dose of vitamin C, about 7,000 times the normal daily requirement, and were subjected again to the "stress test" of forced swimming. Blood samples were taken. This part of the project was conducted in the student's home. Blood analysis were performed at a medical office under the supervision of a Registered Nurse. No one supervised the animal experiments at home. Awarded Second Place.

*"The Effect of Alcohol on Mice,"* 10th grade, Laurel Senior High. Home Sup. by veterinarian.

Six mice were deprived of drinking water and vodka substituted for 32 days. The alcohol content was progressively increased until they were finally receiving 40% alcohol. Some of the animals were killed, by means unspecified, and the livers examined. Gross abnormalities were revealed. The "flesh [of the liver] had become all shriveled up," stated the student's report. Some of the alcohol-fed animals were placed with other mice and allowed to fight. "The conditions were bad" in these cages, said the student. The animal regulation compliance forms were signed by a veterinarian. Special Award.

*"The Effects of Alcohol on Mice,"* age 13 years, Francis Scott Key Jr. High. Home.

Three mice were given gin instead of drinking water for two weeks. One mouse died. A veterinarian gave "advice," but no claim was made that this project had been supervised.

*"Effect of Gin on Gerbils,"* age 12 years, Greenbelt Jr. High. Home. Claimed Sup. by teacher.

Four gerbils were deprived of drinking water and gin was substituted. As a result, the animals became ill. A child onlooker at the exhibit said, "Now I'll know to give my gerbils gin to turn them on." Although it was claimed that this project was "supervised" by the teacher, by the student's own account, the teacher never saw the animals and did not even know what the project comprised until after the experiments were completed. Awarded First Place.

*"Alcohol and its Effects on Animals,"* age 13 years, St. Philip the Apostle School. Home.

Mice were deprived of drinking water and given alcohol until they became sick. The student's father gave "advice," but supervision was not claimed.

*"Effects of Alcohol on Mice,"* age 14 years, Andrew Jackson Jr. High. Home and School. Sup. by teacher.

For 10 days mice were deprived of drinking water and alcohol substituted, which had a deleterious effect on their health.

*"Conditioned Responses,"* grade 10, Parkdale Senior High. Home.

Mice were conditioned to respond in a certain manner by applying electric shocks. The shock continued until the animal moved away from that part of the apparatus. When the shock didn't stop, one mouse started to run around madly seeking escape, but was so alarmed that it didn't even stop when it did arrive at the nonelectrified area. It was exhausted by the time it finally managed to escape the shocks. Special Award.

*"How Intoxication Affects Animals,"* age 13 years, Margaret Brent Middle School. Home.

Mice were deprived of drinking water and alcohol substituted until deleterious effects were manifest.

*"Effect of Cyclamates on Mice,"* grade 12, La Reine High. Home. Claimed Sup. by a "Dr."

Four mice were injected with doses of cyclamates, a substance known to have harmful effects on health. The student's report stated "large doses cause mice to die." The report was so unclear and poorly written up that it was impossible to determine what, in fact, happened to the animals.

*"Effects of Sleep Loss on Mice,"* 12th grade, La Reine High. Home Claimed Sup. by dentist.

For three days, eight mice were subjected to treatments designed to prevent them from sleeping. The



Washington, D.C. Area Science Fair  
April 22 and 23, 1972

"From Four Parents One Offspring," 12th grade, Coolidge High. Home. No Sup.

Attempts were made to perform surgical operations on pregnant guinea pigs. Part of the uterus of the donor animal was removed during the course of the operation, and 12 attempts were made to implant fertile eggs into the womb of other animals. The student stated that before engaging in these activities, he had never seen the internal organs of a guinea pig, nor had he ever had any surgical or anesthetic techniques demonstrated to him. His knowledge of anatomy was restricted to having once dissected a frog several years before. He thought this was a "big jump" to go straight into surgical operations on guinea pigs. No one was with him when he operated. The surgical instruments, valued at several hundred dollars, were "given" him by a microbiological technician from a local military hospital. The instruments were on display along with a hypodermic syringe and needles. The exhibit was untended from time to time, thus giving opportunity for theft for possible drug abuse usage. Also on display was ether, a highly flammable substance, which must be kept away from lighted cigarettes.

As a result of these surgical ventures, a guinea pig died, and one can only surmise the adequacy of the anesthetic in other operations which lasted over two hours. Using ether as an anesthetic requires considerable skill and constant surveillance to maintain correct depth, thus assuring insensitivity to pain. One operation, which the boy claimed a "major breakthrough in genetics," resulted in the recipient animal aborting a still-born, half-formed foetus, pickled and on display.

Despite the fact that this project was in flagrant violation of the rules, a point made clear to the fair organizers, it received First Place Award and was chosen as runner-up to the two winners selected to exhibit at ISEF.

"The Effect of Ultraviolet Radiation on the Disease Rickets," age 14 years. Home. No Sup.

Four mice were fed a grossly inadequate diet and kept in total darkness until, according to the student, they were unable to stand up or walk. The object was then to bring them back to health by exposing them to ultraviolet light. On questioning, the student said he did not know that ultraviolet light was harmful to humans, could cause blindness, and that ultraviolet lamps needed to be handled with care. Fortunately, the human health hazard was avoided because the boy had not used an effective source of ultraviolet light, but this he had not realized.

"Digitoxigenin Convulsant as a Agent," grade 11, Entry No. 1. Research Inst. Sup.

Pads were placed over each eye of a mouse, electric current was passed through these pads to the brain causing the animal to run around uncontrollably and go into clonic convulsions. Convulsions were produced in other animals by means of a drug. A total of 1,000 animals were so convulsed. Two or three animals died (the student couldn't quite remember how many).

"An Investigation of the Function of Testosterone," grade 10, Entry No. 7. School. Sup. by teacher.

A mouse was anesthetized and castrated. The supervising teacher had never performed this operation before on this species but had once castrated a rabbit. A single post-operative observation was made, and this consisted of placing the castrated animal with a normal mouse and watching them fight. No other data was collected. A prize was awarded.

"Cancer," 10th grade, Entry No. 8. Research Inst. and Home.

Cancer was induced in a mouse which the student took home. No scientific observations were made on the animal, which developed massive tumors, became grossly deformed, and was on display. Awarded a prize. "How Does the Effect of Alcohol on White Mice Differ from that of other drugs," Entry No. 11. Home. No Sup.

Three mice were deprived of drinking water and given bourbon as their sole source of fluid until one died. Incompatible animals were caged together and fought. The dead animal was on display.

"The Effects Alcohol Has on Mice," age 12 years, Entry No. 1. Home. No Sup.

Two mice were deprived of drinking water and gin substituted. One animal died as a result.

"The Effects of Nutrition on Rodentia," age 13 years, Entry No. 1. School.

Two mice were fed inadequate diets until they became sick and lost weight. The animals were on display in tiny, dirty cages with no drinking water.

animals, as a result, became aggressive, fought among themselves, and bit the experimenter. A "student" of unspecified age helped take blood samples from the animals. The form stating that this animal project conformed to the guidelines was signed by the "supervisor" who listed his qualifications as "Dentist and personal friend." Awarded Honorable Mention.

"Can Mice Detect Color?," Home. Claimed Sup. by teacher.

"The Learning Process of Hamsters," (maze), Home. No Sup.

"Motivation" (mice, maze). Home. No Sup.

"Trichinosis," (parasitic infection, animals painlessly killed). Research Inst. Sup.

"Detecting Stimulus Concept Formation in Rats" Home. Sup.

\*"How Much do Mice Depend Upon Instinct?" (tests for survival instincts). Home. Sup.

"Mice and Their Environment" (normal behavior).

17th Annual Northern Virginia Science  
and Engineering Fair

Fairfax County Schools, Areas III and IV and  
Manassas Area of Prince William County,  
March 26, 1972

"The Effects of Prolonged Stress on Mice," Entry No. 10 A 1, age 15 years. Home. Sup.

Stress was induced in 8 mice by depriving them from free access to food. For 4 weeks, their only means of obtaining food was to run a complicated maze where, after one successful run, an animal would be given a small amount of food. As a result, one animal developed "a digestive ulcer" (sic) and others showed signs of "beginning ulcers" (sic), according to the student's report. Awarded First Place, also award from the Washington Junior Academy of Sciences.

\*"Microwave Medical Effects," Entry No. 8 H 5, age 13 years. Home and Research Inst. Sup. by veterinarian.

Mice were subjected to irradiation and kept at the student's home. One mouse received 75 mv, another 300 mv, and a third animal received 25 mv per hour for a total of 6 hours. Blood samples were taken and analyzed at a commercial laboratory. The project was so poorly written up that it was impossible to determine what happened. A veterinarian signed the form stating that this project complied with animal regulations. Awarded Honorable Mention.

"Investigating the Effects of Vitamin C on the Respiratory Quotient of White Mice," Entry No. 12 B 3, age 17 years. Home. No Sup.

The metabolic rates of mice were determined. One animal was asphyxiated through improper procedure. \*"Nutrition Effects on Swiss Webster Mice," Entry No. 8 H 7, age 13 years. Home. Sup. by a geneticist.

A diet lacking in vitamin A and vitamin D was fed to 7 mice for 6 weeks. These animals, as a result, developed an abnormal appearance of the eyes, showed breathing difficulties, jerky movements, and lost weight. Awarded First Prize.

"Effect of Strain on Mouse's Brain," Entry No. 9 F 2, age 14 years. Home.

A mouse was revolved on a gramophone turntable continuously for 2½ hours. This experience, designated "a flight" by the student, caused the animal distress. The turntable procedure was repeated. The mouse was then shot up in a rocket, the purpose of which was not apparent, since no observations were made. The reports of these activities were so poorly presented that it was difficult to tell what happened. The student's father gave "advice" but supervision was not claimed. Honorable Mention.

"Embalming" (two guinea pigs killed by means unspecified, embalmed, and the rates of decomposition of the tissues determined). Home.

\*"Isolation of Genetic Strains in Mice" (breeding studies). Home. Claimed Sup. by teacher.

The animal regulation compliance form was signed by the "supervising" teacher, but according to the student's own testimony, the teacher never saw the animals until the project was completed. Grand Prize Winner—this qualified for entrance to the ISEF.

"Mouse Education" (maze). Home.

"Health Food vs Starch Diet on Mice," Home. No Sup.

"Intelligence Study of Gerbils" (maze).

\*"Mouse-a Maze" Home. Sup. by veterinarian.

"Auditory Discrimination in Guinea Pigs." Home.

\*"The Learning Behavior of Mice" Home. Claimed Sup. by teacher.

"Are Mice Subject to Hypnosis?"

"Breads—the first book of food," age 13 years. Home. No Sup.

Rat fed inadequate diet until it became sick.  
"Mouse and Maze"

### Conclusion

Rules are needed which state that, in student work, experimental procedures on warm-blooded animals should be limited to those which the student could perform on himself without causing hazard or harm, i.e. they shall involve no distress, pain, or lingering death. Nutritional deprivation studies should be banned. Furthermore, no experiments on warm-blooded species should be conducted in students' homes. Thus, non-painful experiments such as studies of learning ability, activity cycles, and normal growth, conducted in schools or research institutions, would be encouraged.

## CONGRESSIONAL COMMITTEE URGES DEVELOPMENT OF SUBSTITUTES FOR LEG HOLD TRAP

The official Report on the Federal Animal Damage Control Act of 1972 issued by the Committee on Merchant Marine and Fisheries, U.S. House of Representatives, July first, deals chiefly with the laudable main purpose of H.R. 13152, to prohibit the use of poison in the Control of predatory animals except in emergency situations.

Humanitarians are encouraged to note that in addition to recommending legislation to end the massive poison program carried out by the Federal Government till President Nixon's Executive Order, February 8, 1972, halted it administratively, the Committee recommends that the leg hold trap be scrutinized. Noting that "At the hearings on this legislation, there was concern expressed by a number of witnesses over the use of steeljaw traps in the control of predatory animals," the Report states (p. 11) "... your Committee would like to make it clear that it expects the Secretary to continue to investigate and develop other methods of control which are more humane and less cruel. This should be done with a view toward employing the more humane methods in each situation at the earliest possible date and not use methods that are unnecessarily cruel and inhumane. When killing must be done, your Committee expects such killing to be done as selectively and as humanely as possible.

"Your Committee noted from the Department of the Interior testimony at the hearings, that the Department is currently spending only \$125,000 on research on nonlethal control methods, coyote behavior, and predatory animal ecology. Your Committee feels that this is totally inadequate. H.R. 13152 would permit the Department to conduct an expanded research program to learn more about predator-prey relationships; develop better and more selective, humane control methods; and get a better idea of what the actual predator-caused losses of livestock really are. At the same time, your Committee expects the Department to assure itself that the methods used to control predators are as safe, selective, and humane as man can make them."

### International Whaling Commission Meeting

(Cont. from page 1)

of his government's expressed policy, sat with an owner of a Canadian shore whaling station on his right, wavering nervously, and often, in effect, supporting the Japanese. Only in the case of Finback whales, was Chairman Train able to lever down the low Japanese-Russian offer, from a kill of 700 in the North Pacific to 650, from a kill of 2000 in the Antarctic to 1950. Both populations of whales are now tragically close to complete disappearance. Last year the Russians and Japanese were not able to find and kill enough fin whales in the North Pacific to fill a quota of 1000, and wound up with a "take" of 813. In the Antarctic, the "sustainable yield" is estimated at around 2000. For a decade, between 1952 and 1962, as the industry (under the aegis of the IWC) turned on the Finback in the Antarctic following the destruction of the Blue Whale, over 20,000 Finbacks were killed annually. In 1960-61, over 27,000 were killed.

The quota of Sei, Sperm and Bryde whales remains

at the "low offer" of the Japanese and Russians, set at maximum sustainable yield estimates made on the basis of Japanese and Russian sightings and catch data. Quotas were imposed on Sperm whale kills south of 40°N. for the first time. A quota on Minke whales, which are now beginning to be massively exploited following the destruction of the large whales, was set in the Antarctic at 5000. The Canadian Atlantic shore stations, which it is now admitted, "mistakenly" decimated the North Atlantic Finback population remains without IWC quota or supervision.

The American delegation left the conference frustrated and disappointed at the intransigence of the Japanese and the Russians, and at the weakness and vacillation of delegations which, it had been hoped, might take a stand for the whales. But there was some encouragement over the limited reforms secured, and over the shattering of pernicious traditions of the Commission. Veteran delegates, who were used to operating the Commission as a closed, private club were dismayed when Chairman Train held a news conference mid-way through the Commission proceedings, and divulged the votes of the commissioners on the U.S. proposal for a moratorium. As a result several commissioners, notably those of Norway and Canada were strongly censured by their home governments. Public interest representatives on the U.S. delegation were also pleased at the prospect of a strong governmental friend of whales succeeding Dr. J. M. McHugh, who resigned at the close of the meeting, as U.S. commissioner, and at the militantly protectionist attitude demonstrated by Mexico, Argentina, and to some extent the U.K. There was optimism that the U.S. by carefully preparing the groundwork, particularly by inducing some of the non-whaling countries who voted for the moratorium at Stockholm to join the Commission and thus provide the votes to override Japanese and Soviet intractability, and through fielding a less mediocre panel of scientists, who are less willing to extrapolate from Japanese and Russian data and who have no record of collaboration with previous policies of the IWC. There is considerable optimism that the strong tide of worldwide public opinion may, by next year, have affected the policies of more member governments.

In the meantime the appalling massacre continues. Quotas have been established for the killing of over 35,000 whales next year. There are fewer whales being killed primarily because there are fewer whales to be killed. The men controlling the Japanese and Russian fleets do not seem to have retreated at all from their determination to extract the maximum possible profit from the now aging factory ships, even if it means the extirpation, or "commercial extinction" of the great whales. There will never be any shortage of arithmetical jugglers to talk of "surplus" and "sustainable yield," and thus obscure the tragedy in a sickly patina of "scientific" justification.

What happens now may be to a great extent dependent on the actions of conservationists. Last summer FOE joined with the Society for Animal Protective Legislation to force the ten year whaling moratorium resolution through Congress, in the face of hostile government witnesses, scornful whaling scientists who said the resolution would make the U.S. "look silly," and a stoney silence on the part of most established conservation organizations. Now the seeking of a moratorium is public U.S. policy, and the policy of numerous other governments, who endorsed the resolution at Stockholm. The United Kingdom, under the prodding of FOE Ltd., is expected to announce a ban on the importation of whale products.

We will sit down, in the near future with other strong conservation groups to work out an effective common strategy to keep up the pressure on whaling this coming year. An economic boycott has been suggested, and we certainly do not rule out this tactic.

In an eloquent and scathing denunciation of the IWC, Mexico's commissioner told the London meeting that Mexico does not accept the view that "in order to have a meaningful voice" in determining the future of whales, we must kill "what are probably the most amazing of nature's creatures, and kill them for profit." Neither does FOE!

## ANIMAL WELFARE INSTITUTE

Scientific Committee on Humane Standards for Research Animals

Marjorie Anchel, Ph.D.  
Bennett Derby, M.D.  
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Paul Kiernan, M.D.  
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Barbara Gould, Publications Secretary

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In the last Information Report (Vol. 21, No. 3) Dr. F. Barbara Orlans summarized 89 projects from eight science fairs, demonstrating conclusively that the majority of projects involving warm-blooded animals inflict pain or lingering death on the animals. The 1969 requirements for supervision have not solved the problem. Dr. Orlans' further comments which follow should be read in conjunction with the data presented in her previous article, a copy of which will be sent on request.

## NEW RULES FOR OLD PROBLEMS

by F. Barbara Orlans, Ph.D.

In local and regional science fairs, the data show that a student's chance of winning a prize for conducting a project in which mammals are harmed or painfully killed is one in three. Thus, of 58 pain-inflicting projects, 21 received prizes.

On viewing the over-all national situation, it would appear that the honor of exhibiting at the International Science and Engineering Fair (ISEF) goes preferentially to vertebrate animal studies (rather than invertebrate studies) and to studies involving animal pain (rather than to non-painful experiment). Thus, a report of the 1972 ISEF by the judge representing the American Psychological Association states: "Fully one half of the students with entries in the behavioral science category worked with vertebrates in their projects, and *all* of these used aversive stimuli, environmental stress, or brain electrode implantation, with eventual animal sacrifice. The majority of entries under medicine also involved vertebrates and over half of these employed aversive stimuli." (Emphasis in original. "Periodically," American Psychological Association Clearinghouse on Precollege Psychology, 1972, Vol. 11, No. 9, page 1).

### No Improvement Effected

No change in pattern of animal use has occurred since the adoption of the 1969 rules; despite the science fair rule that "protista and other invertebrates are preferable for experiments involving animals," twice as many projects used vertebrates (48%) than invertebrates (24%). Small mammals were by far the most commonly used species. Furthermore, there has been no reduction in the incidence of pain-inflicting animal projects since the previous survey (Information Report, Vol. 19, No. 2, 1968).

### Location

An overwhelming proportion of projects, 80%, were conducted in students' homes (see Figure). The usual locations were basements, bedrooms, and kitchens.

### Certification of Compliance

Science Service, the administrators of science fairs, strictly enforces the rule that finalists exhibiting at the International Science and Engineering Fair present certification of compliance with provisions of their "Guiding Principles" which include the requirement for immediate supervision by an individual who has received "training in the proper care of laboratory animals." However, very cursory, or no effort, is made by participating, affiliated fairs to enforce these rules in the preceding local and regional fairs. Thus, in three of the six fairs affiliated with ISEF no compliance forms were exhibited for any student; in the other three, only a sparse number of compliance forms were shown. Furthermore, many of these signed forms were spurious because the "supervisor" had not complied with the rules. Thus, some "supervisors" were *not* trained in animal husbandry or were *not* physically present where the tests were conducted, and many projects had not complied with the rule that animal experiments "*must* be conducted with a respect for life and an appreciation of humane consideration." (Emphasis in original).

Unless humane standards exist and entry rules are enforced at the local level, it is illogical to expect them to exist at the national level, at the ISEF. However,

(Cont. on page 3)

## LAW ENFORCEMENT BY USDA'S ANIMAL CARE STAFF

The Animal and Plant Health Inspection Service of the U.S. Department of Agriculture is now issuing a newsletter called "Update on Animal Care Activities." Following are excerpts from the October 24, 1972 issue

"More than 700 horse shows and exhibitions have been inspected under the Horse Protection Act for compliance with regulations in effect since Feb. 1, 1972. More than 175 cases of alleged violations are being processed, with the first one filed and waiting for a trial date in Federal court. (The charge—exhibiting a horse wearing illegal boots—was issued Aug. 25 against Kenneth Boaldin, Mansfield, Texas).

"Who keeps sore horses out of a show? Not APHIS officials. The Horse Protection Act does not give USDA the authority to keep a horse from competing or to close a show if it includes sore horses. The Act sets two ways for preventing sore horses from being shown. First, exhibitors are forbidden to enter sore horses in competition; second, management is required to bar or remove sore horses. If exhibitors and management do not meet their obligations, then APHIS has the responsibility and authority to press charges. This procedure works. Management in some extreme cases has all but stopped competition. The second night of the Phoenix Aid-to-Zoo Show (Feb. 24), a class of 12 Tennessee Walking Horses was culled to 4. The second night of the National Celebration at Shelbyville, Tenn. (Aug. 25), management excused 35 of 107 horses entered in the first two classes.

Received as the Information Report went to press.

### MAN CHARGED WITH SORING

On December 21, Don Bell of Fayetteville, Tennessee was charged by the U.S. Department of Agriculture with "soring" a Tennessee Walking Horse in violation of anti-cruelty provisions in the Horse Protection Act of 1970. The case was filed on USDA's behalf by the U.S. Attorney in Birmingham, Alabama. The case alleges that Mr. Bell caused the front legs of a Tennessee Walking Horse, "Bo-Mar's Ebony Belle," to be sored to accentuate its gait during horse show competition. It further alleges that Mr. Bell willfully and knowingly transported the horse across State lines. Both charges are direct violations of the Act.

The horse was awarded First Prize in its Class during competition at the First Annual Diabetes Trust Fund Charity Horse Show in Decatur, Alabama September 16th.

When APHIS veterinarians lifted one front leg for examination following competition, the horse allegedly dropped to its knees because it was in such pain that it could not bear to hold itself up on one front leg. The horse allegedly showed extreme sensitivity and signs of irritation in both front legs.

The Horse Protection Act provides for both civil and criminal penalties. It could involve as many as three parties in each violation of anti-soring regulations. Exhibitors may not show a horse that has been made sore to affect its gait. Owners may not permit their horse to be shown if it has been sored, and show management may not permit sored horses to compete. Upon conviction, maximum penalty for the charge is a fine of two thousand dollars and six months imprisonment.

"Licensing and registration under the Animal Welfare Act continues to grow. As of Oct. 19, APHIS licensed 1,165 animal dealers; registered 737 research institutions comprising some 2,200 sites; and licensed or registered 460 exhibitors. This tally is up from 210 licensed dealers and about 1,500 research sites covered last year under the

initial 1966 legislation. APHIS continues to urge that those required to apply for licensing and registration do so promptly. After having applied, they need do nothing further until contacted by APHIS. Due to limitations in money and manpower, APHIS has a number of unprocessed applications still on hand.

"Charges of inhumane handling were made against one dog dealer while earlier charges against another were settled. Harold Miller, Granger, Mo., was charged with (1) transporting dogs in cramped crates; (2) penning too many dogs in the same cage; and (3) violating identification and record-keeping requirements. On Oct. 3, Mr. Miller was given an extension of 20 days to respond to the charges.

"Field inspection by APHIS involves many responsibilities, including disease eradication and control as well as animal care. Currently, the field force is at work repulsing a new threat from hog cholera in the Midwest, fighting a bad outbreak of screwworms in the Southwest, and stamping out an invasion of exotic Newcastle disease in the far West. For these emergencies as well as routine activities, there is a field force of nearly 700 veterinarians and 600 inspectors in 48 field offices. These are organized into four regions, each with a regional director, and the over-all program is coordinated by the Assistant Deputy Administrator of APHIS. This method of organization helps promote uniformity of enforcement, and the best allocation of limited resources.

"Zoo animals are getting better care thanks to licensing requirements. Before APHIS issues a license, zoo management first must comply with all standards under the Animal Welfare Act. Take for example the extensive renovation at Beardsley Park Zoo, the municipal zoo of Bridgeport, Conn. Within 2 months after a precensuring inspection turned up unsatisfactory conditions, the zoo installed and equipped a new animal hospital and quarantine building; installed a new watering system; built fencing, new cage fronts and metal rails to protect animals and people from each other; channeled drainage to avoid one animal's being fouled in another's waste; retrained the staff to improve feeding and handling practices; and instituted a master plan to further improve the zoo so that in the future the animals will receive care well above the minimum requirements of the Act.

\* \* \*

"U.S. Marshals occasionally assist APHIS inspectors at horse shows when the Veterinarian in Charge of the inspectors feels they might be threatened, intimidated, or prevented from carrying out their duties. Previously, exhibitors and fans at a few shows distracted, interfered with, and even assaulted APHIS inspectors after horses had been eliminated from competition."

Important Note: In response to a request for information on numbers of places where animals are kept which must be inspected under the Animal Welfare Act, the AWI received figures from USDA's Animal Care Staff which show an enormous increase of work to be done under the new law as compared with the old. Under P.L. 89-544 (the Laboratory Animal Welfare Act) 210 animal dealers were licensed. Under P.L. 91-579 (the Animal Welfare Act) 1,376 dealers were licensed as of December 6, 1972, and it is estimated that a total of approximately 4,400 will be licensed when the law is fully in effect. It is further estimated that some 1,450 exhibitors will be licensed or registered when the work is complete. As of December 6, 330 exhibitors are registered and 180 are licensed. Under P.L. 89-544 there were 557 registered research facilities with 1,436 inspection sites. Under P.L. 91-579 there are now 756 with an estimated 2,300 inspection sites.

Manpower to complete inspections is clearly inadequate. Approximately 17% less people are available to operate the program than when the Animal Welfare Act was passed. It is vitally important that qualified personnel be made available at the earliest possible time to carry out these important programs which were unanimously approved by the U.S. Congress.

## MARINE MAMMAL PROTECTION BILL BECOMES LAW

The Marine Mammal Protection Act, P.L. 92-522, which was signed by President Nixon on October 21, 1972, has been quite fully reported in the Information Report from its first day of hearings September 9,

1971 through debates on the floor of both House and Senate. It was held in conference for weeks before final unanimous approval by both Houses of Congress. Nominations for the important three-man Marine Mammal Commission and the nine-man Scientific Committee have been sent to the White House. The 10-page bill which divides authority between the Departments of Interior and the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) is regarded as a considerable responsibility for the enforcing agencies. Based on the permit system, the new law requires proof that harm will not be caused the species, the population, or the ecosystem of which they are a part, if animals are either killed or captured. The burden of proof lies with the permittee who wishes to take the animals.

The law allows the Secretary (meaning the Secretary of the Interior or the Administrator of NOAA) to make exceptions to the permanent moratorium laid down by the Act, and issue permits.

Importation of pregnant or infant marine mammals is banned. This means that the white coats, the baby seals killed in Canada each spring, will not enter the American market in any form, whether as leather, fur, or fat. The Pribilof seals, however, will continue to be killed, and the permit system does not apply to them.

Outgoing Secretary of Commerce, Peter Peterson, proposed that seals on St. George's Island (the smaller of the two Pribilof Islands where sealing is carried out) not be killed and that a study of this population be compared with a similar study of the population on St. Paul's Island where the killing of "bachelors" will continue. This action is not called for by the new law, but it is an offshoot of the interest developed as a result of the hearings and legislative action.

Secretary Peterson has also moved to improve the situation for dolphins and porpoises, hundreds of thousands of whom are currently caught inadvertently in enormous purse seines set for tuna fish. \$300,000 has been allocated for study and development of fishing techniques which will spare the small cetaceans.

"When one porpoise dies in a tuna net that is one death too many," Secretary Peterson said in a recent release. He also said it is "absolutely essential" to protect this "magnificent animal."

The Marine Mammal Protection Act calls for the reduction of "incidental kill or incidental serious injury of marine mammals permitted in the course of commercial fishing operations . . . to insignificant levels approaching a zero mortality and serious injury rate" within two years. However, this is a goal, not a flat requirement of the law as humanitarians wished it to be. Amendments were offered on the floors of both Senate and House which would have required a firm cut-off date on the drowning of dolphins and porpoises in the tuna nets but these amendments were defeated. The amendment adopted on the floor of the House to require a five-year moratorium on commercial killing of most species of sea mammals was lost in the conference between House and Senate. The Senate had rejected a similar amendment. A finder's fee up to \$2,500 for information on violation of the Act was retained after being lost in the Senate Commerce Committee and restored on the Senate floor.

The animals covered by the new law: seals, sea lions, walrus, manatees, sea otters, polar bears, whales and dolphins, are far from receiving complete protection, nevertheless, the only Americans who can still kill them with impunity and without a permit are Eskimos, Indians and Aleuts who use them for sustenance or native crafts. This is a major forward step in the general protection of these creatures.

Further, the Act requires that, when killed, they must be killed humanely. The definition: "The term 'humane' in the context of the taking of a marine mammal means that method of taking which involves the least possible degree of pain and suffering practicable to the mammal involved." Clearly, neither such an agonizing method as the explosive harpoon or so long-drawn-out a method as drowning could be allowed under this definition. The products made from inhumanely killed sea mammals cannot be imported into the United States nor can they be so killed by Americans in waters under the jurisdiction of the United States.

Fines go up to \$20,000 for willful violation of the new law. The cargo of a vessel may be confiscated.

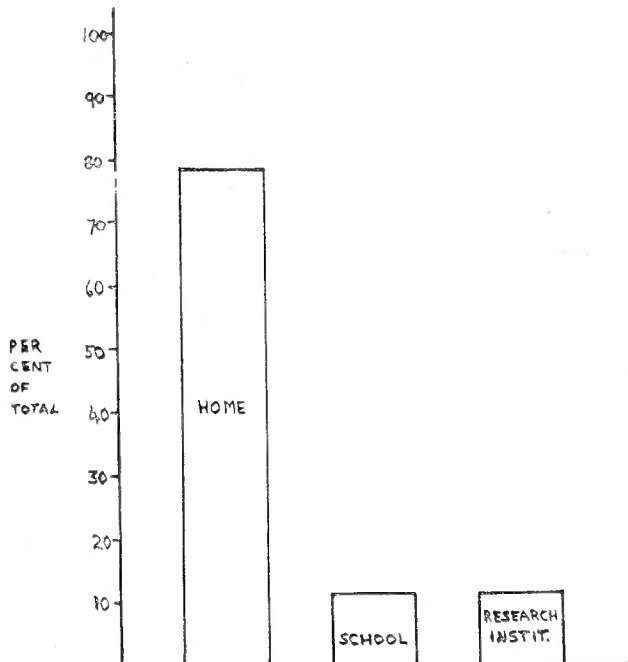
The effects of this far reaching Act, which calls for international action and research to protect sea mammals, cannot be estimated yet. All who are interested in this fascinating group of highly developed creatures should interest themselves in following the administration of the law in the coming year.



## New Rules For Old Problems

(Cont. from page 1)

Science Service has, in the past, expressed the view that standards existing at the affiliated local fairs are outside their purview, a view not likely to enhance public confidence in their administration.



LOCATION WHERE SCIENCE FAIR PROJECTS PERFORMED

To show that of the total 70 science fair projects for which information is available on where mammalian projects were conducted, 54, or 78% were performed in students' homes, 7½, or 11% at schools, and 7½, or 11%, in research institutions. The projects which were conducted in 2 places were counted as ½ point for each location.

### Unacceptable Supervised Projects

Results show that the vast majority of animal projects received no supervision, or cursory supervision. But even when projects were supervised in accordance with ISEF rules, this did not ensure humane treatment of animals. A clear demonstration of that fact is provided by the following projects, all of which met ISEF supervision specifications.

\*A well-known lethal poison was administered to a monkey resulting in permanent kidney damage. The human disease resulting from ingestion of this poison is known as "Itai, itai," Japanese for "It hurts, it hurts."

\*Two almost identical projects conducted by a 13 year old and a 14 year old in different schools involved spinning gerbils for over two weeks in tiny cages attached to constantly revolving turntables. In one case the animal was on display and was judged to be in such grievous condition that the only humane course would have been to kill it painlessly.

\*1,000 animals were subjected to convulsions produced either by placing pads over the eyes of mice and passing electric currents through the brain or by other means. The 16 year old boy who did this project was so overwhelmed with the vast number of mice he had used that he could not remember whether it was two, three, or more animals that had died.

\*A mouse was exposed to cigarette smoke until it became blind.

Relying exclusively on supervision to deter improper animal experimentation by youngsters has not worked. For 15 years such rules have failed. Although supervision is important and every effort must be made to improve the currently deplorable standards of supervision, other approaches are needed. Other dimensions must be added which will aid the teacher and student in comprehending the boundaries of novice animal experimentation.

### Model Rules for Pre-College Students

Working to curb abuses similar to those in U.S. science fairs, Canada has made remarkable headway in the past four years under the leadership of Harry Rowse, D.V.M., D.V.P.H., Ph. D., Executive Director, Canadian Council on Animal Care. The Canadian national system requires that all students' animal projects be approved by a regional council of humane-minded people many of whom are veterinarians, before the student starts his experiment. The rules specifically prohibit infliction of pain or distress, and provide that experimental studies with vertebrates should not take place in the home but must be carried out in a suitable area in the school.

In Edmonton, Alberta excellent standards have been issued for the 1972-3 Edmonton Youth Science Fair by David Secord, D.V.M., Director, Health Sciences, Animal Centre, The University of Alberta, working with the national system.

Following are the "Regulations for Animal Experimentation" for high school students in Edmonton.

- (i) Plants, bacteria, fungi, protozoa, tissue culture, insects and other invertebrate animals should be used **WHENEVER** and **WHEREVER** possible.
- (ii) The normal health of living vertebrate animals must not be interfered with or the animal must not be caused pain or distress.
  - anaesthetic agents must not be used
  - surgical procedures must not be used
  - ionizing radiation must not be used
  - nutritionally deficient diets must not be used\*
  - toxic compounds must not be used
  - drugs which produce abnormal side effects, including birth deforming side effects, must not be used
  - substances causing cancerous growth must not be used
  - painful stimulation must not be used
  - organisms capable of causing disease in humans or animals must not be used
  - food must not be withheld longer than 12 hours
  - egg embryos must be destroyed humanely on the 19th day.
- Students, using animals **MUST** insure for the proper housing, food, water, exercise, cleanliness and gentle handling of these animals at all times. Special arrangements **MUST** be made for care during weekend, holiday and vacation periods.
- Each student must have a supervisor or teacher who is knowledgeable in the details of routine care of the animal under experimentation and is knowledgeable of the aims, objectives and experimental procedures of the project.

If all science fairs adopted and enforced such clearly stated rules the animal suffering detailed in the last AWI Information Report would be prevented. To be effective positive suggestions must be made. Studies of plants, bacteria, fungi, protozoa, worms, snails or insects should be promoted. Also encouraged should be mammalian studies such as non-hazardous human studies and animal studies of measuring normal physiological parameters such as growth, activity cycles, learning processes, and normal behavior. None of these studies involve animal pain. Adoption of this sound principle that animal experimentation for pre-college students shall be painless has proved highly effective in curbing animal abuse in other countries without stultifying young people's biological education. With general adoption of such rules worthy teachers who have clearly demonstrated that good standards of animal care and humane animal studies are possible in a high school classroom can rest assured that they will receive only encouragement.

\*Current U.S. rules specify that the dietary deficiency may proceed only to the "point" where disease symptoms occur and that the deficiency shall then, if possible, be corrected; otherwise, the animals must be humanely put to death. However, these cautions have proved ineffective because inexperienced youngsters (and even teachers, if untrained in pathology) cannot identify this "point".

In a number of projects in this survey, the deficient diet was fed to animals until they became blind (one animal), or dead (fourteen animals). To comply with the euthanasia proviso requires knowledge and experience of humane killing methods and ownership of appropriate equipment. It is unrealistic to believe that mammalian euthanasia skills are generally found in the high school situation, let alone in students' homes. Complete elimination of diet deficient animal studies would not hamper sound nutritional education in elementary and secondary schools. There are far better ways to teach about good eating habits.

### CHANGES IN AWI ADMINISTRATION

It was with great regret that the directors of the Animal Welfare Institute accepted the resignation of Dorothy Dyce, Laboratory Animal Consultant to the Institute for eight years of dedicated work. The results of the great efforts she made caused a major reduction in abuses in the care and treatment of animals destined for or used in research and testing. The changes brought about by her inspections and the actions she took following them, continue to affect thousands of animals.

Marilyn Chamberlain has taken the position of Publications Secretary for the AWI, formerly held by Barbara Gould. Mrs. Gould is now the Administrative Assistant to the President.

## 2000 FINCHES STARVED TO DEATH BY AIRLINE

The inexcusable callousness and negligence of Pan American Airways personnel which caused death by starvation to two thousand wild song birds is described in the following Reuters dispatch which appeared in *The Miami News*, June 22, 1972.

"LONDON—Pan American Airways officials here have admitted responsibility for a mix-up which killed 2,000 caged birds.

"The dead birds were part of a consignment of 7,000 tiny Indian finches flown into London in 13 wired crates on the way to a Miami dealer.

"Neville Whittaker, manager for the Royal Society for the Prevention of Cruelty to Animals at Heathrow Airport said yesterday the bodies of the 2,000 birds were decomposing in their cages, when the crates were finally opened.

"The little water they had was putrid and they had not been fed for days,' he said.

"A Pan Am spokesman said later: 'We carried the birds from New Delhi to London where they should have been transferred to another airline for their journey to Miami.

"Unfortunately, they were carried by mistake on one of our services to New York. There, cargo officials knew nothing about them and decided to return them to London.

"If they had been watered and fed in New York, they would still have been in good condition.' He said this was a serious slip up on the part of our staff in New York.

"The Miami dealer is Gators of Miami, Inc. of 5500 NW 74th Ave. The surviving birds were being sent to the dealer."

## ZEEHANDELAAR INDICTED

According to a report in *The New York Times*, December 7, 1972, Fred J. Zeehandelaar who boasted in his book, "Zeebongo, the Wacky Wild Animal Business," (Prentice-Hall, Inc., 1971) that "I have very few competitors . . ." has been indicted for an alleged violation of the Endangered Species Act.

The *Times* stated: "A major importer of wild animals was indicted by a Federal jury here yesterday on charges of submitting false statements in an attempt to import 20 live cheetahs for a Florida commercial attraction called Wild Kingdom, Inc.

"United States Attorney Whitney North Seymour, Jr. identified the defendant as Fred J. Zeehandelaar of New Rochelle, N. Y. who was accused of using a falsely dated check to indicate he had an order for the animals before cheetahs were placed on the Government's list of endangered species.

"Mr. Zeehandelaar was seeking a special permit to import the 20 cheetahs from South-West Africa according to Anne S. Eristoff, the prosecutor in the case, who said the defendant could face up to five years in prison and \$10,000 in fines if convicted."

Efforts over the years by the Animal Welfare Institute to learn about conditions under which animals imported by Mr. Zeehandelaar were transported and held were repeatedly rebuffed. However, the following passage from his book, "Zeebongo," shows a cynical disregard of the welfare of the animals from which he makes so much money so long as their death is covered by insurance: "I had to pay for the birds at the time they were shipped to Hannover or Gelsenkirchen—and then sweat for my money until the zoo determined that the live penguins that managed to survive the trip ate 'fish from the hand.' Obviously, my profit on this 56-penguin deal depended upon the number of birds with good appetites. Penguins that died enroute, of course, were fully covered by insurance."

NOTICE: The mailing address for the Animal Welfare Institute has been changed. The new address is: P.O. Box 3650, Washington, D.C. 20007.

## CONGRESS PASSES RESOLUTIONS FOR INTERNATIONAL PROTECTION OF POLAR BEARS

Hearings on H. J. Res. 1268 to seek an international moratorium on killing polar bears were held by a subcommittee of the House Foreign Affairs Committee July 26, 1972, the anniversary of the date on which a similar Resolution calling for a moratorium on commercial killing of whales was heard by the same Committee. The Resolution was introduced by Congressman William Whitehurst (R., Va.). Testimony urging favorable action was presented by Chairman of the Council on Environmental Quality, Russell Train, and by numerous conservation and animal protective groups. Congressman Donald Fraser (D., Minn.), Chairman of the Subcommittee on International Organizations and Movements, was in the Chair. The Resolution was passed by the House of Representatives and sent to the Senate where the Committee on Foreign Relations approved it, following amendments, by unanimous voice vote on September 29th. The Senate passed it unanimously.

The Senate and House versions of the Resolution are not identical; however, both carry the sense of the Congress that protection of the polar bear by international convention is urgently necessary. As noted in the Report issued by Senator William Fulbright (D., Ark.), Chairman of the Foreign Relations Committee, "The polar bear is thought to have existed during the ice age of the Pleistocene period. . . . This animal inhabits the arctic regions of the following five countries: Canada, The United States (Alaska), Norway, Denmark (Greenland), and the U.S.S.R. The world population of polar bears has been estimated as somewhere between 5,000 to 20,000 animals. Despite these low population estimates, the annual polar bear kill is about 1,300.

"Hunting by American and Scandinavian sportsmen is the primary threat to this animal. However, there is, also, a large illegal market for their hides. In the United States, the polar bear hunt is managed by the Alaskan Fish and Game Department. This State agency issued 300 permits in 1971 and has thus far officially recorded 265 kills for 1972. Although the shooting of bears from aircraft has been prohibited in the United States (Public Law 92-159), the animal is still hunted from spotter planes which chase the bear to a hunter on the surface. Alaska has announced plans for 1973, to outlaw this practice but will still permit hunting from dog sleds, boats, and snowmobiles.

"The Soviet Union is the only country which has taken affirmative action to protect this animal. In 1956, the Council of Ministers of the Russian Federation completely banned polar bear hunting in the U.S.S.R.

"In 1968 an international 'Polar Bear Specialist Group' was formed under the auspices of the International Union for the Conservation of Nature and Natural Resources (IUCN) to study the bear's migration patterns, populations and ability to withstand arctic conditions. This group met in February of 1972 and urged all nations concerned:

"(1) To take appropriate action to prohibit from 1973 onward, hunting of polar bears on the high seas, including the area of circumpolar pack ice, except where such hunting is carried out as a continuation of the traditional rights of local people who depend on this resource; and (2) to protect, within their own territories, polar bear denning and feeding areas and to manage their own separate polar bear populations in consultation with other nations sharing these populations."

## SAVE A DOLPHIN

*The Audubon Leader*, July 28, 1972 reports, "At the behest of a group of students concerned because tuna fishermen are using a method which each year needlessly drowns hundreds of thousands of porpoises and dolphins caught in tuna nets, the Greenwich (Conn.) Board of Education has banned tuna fish from the school lunchroom menu until steps are taken to protect these ocean mammals."

## ANIMAL WELFARE INSTITUTE

*Scientific Committee on Humane Standards for Research Animals*

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